

# THE NUCLEAR NON-PROLIFERATION TREATY

ORIGIN AND IMPLEMENTATION

1959-1979

Volume II

*by*

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*To Mona  
Shahira And Mahmoud*





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PART III  
(Continued)

*"The Treaty should embody an acceptable balance of mutual responsibilities and obligations of the nuclear and non-nuclear Powers"*

(Principle (b))



## CHAPTER 8

### Nuclear Security Guarantees and UN Security Council Resolution 255

#### Texts :

#### Article 3 of Additional Protocol 11 to the Treaty of Tlatelolco

The Governments represented by the undersigned Plenipotentiaries also undertake not to use or threaten to use nuclear weapons against the Contracting Parties of the Treaty for the Prohibition of Nuclear Weapons in Latin America.

#### Preamble of the NPT

Recalling that, in accordance with the Charter of the United Nations, States must refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State, or in any other manner inconsistent with the Purposes of the United Nations, and that the establishment and maintenance of international peace and security are to be promoted with the least diversion for armaments of the world's human and economic resources,

#### Operative Part of Security Council Resolution 255

1. Recognizes that aggression with nuclear weapons or the threat of such aggression against a non-nuclear-weapon State would create a situation in which the Security Council, and above all its nuclear-weapon State permanent members, would have to act immediately in accordance with their obligations under the United Nations Charter;
2. Welcomes the intention expressed by certain States that they will provide or support immediate assistance in accordance with the Charter, to any non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is a victim of an act or an object of a threat of aggression in which nuclear weapons are used;

3. Reaffirms in particular the inherent right, recognized under Article 51 of the Charter, of individual and collective self-defence if an armed attack occurs against a member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security.

\* \* \* \* \*

Since the advent of the nuclear age, the security of nations has taken new dimensions unparalleled in the history of mankind. The experiences of Hiroshima and Nagasaki will remain vivid examples of the destructive and indiscriminate nature of nuclear weapons. The role that the nuclear weapons has also come to play as an instrument of foreign policy and deterrence has marked the post-World War II era. In such an atmosphere, nations have followed different courses to ensure their security. Some have found that the best way to ensure their own security was to acquire the lethal weapons themselves. Others have joined military alliances whereby they enjoy a sort of guarantee of nuclear protection by the major nuclear ally. Some have even signed bilateral agreements for defence purposes with the nuclear ally. For the majority of nations, the non-aligned, security has generally been sought through efforts to achieve nuclear disarmament and arms control measures including the non-use or threat of use of nuclear weapons.

However, efforts to secure a non-proliferation treaty have sharpened the issue of security in dramatic proportions. Nations beyond the existing nuclear-weapon States were asked to forego the acquisition of nuclear weapons so as not to complicate further the preservation of peace and security in a changing world. But if nations were to forego the option of acquiring such weapons, what kind of guarantees, it was asked, can be offered in order that the same weapons will not be used against

them or that the nuclear-Powers will protect them in case they are attacked or threatened by nuclear weapons ? These two types of guarantees, i.e., non-use and protection have come to be known in the disarmament jargon as "negative" and "positive" nuclear guarantees respectively.

Nuclear security guarantees are, therefore, at the centre of non-proliferation efforts. As security was and remains the main incentive for proliferation, guarantees may become effective disincentives for potential proliferation, especially in areas of the world where prolonged conflicts do persist. But if nuclear guarantees may be looked upon on their own merits, as non-proliferation measures, they were particularly considered by a great number of non-nuclear-weapon States as a prerequisite for an equitable balance of mutual responsibilities and obligations of the nuclear-weapon and non-nuclear-weapon States in a non-proliferation treaty.<sup>1</sup> As far as the application of principle (b) is concerned, banning of the use of nuclear weapons and assurance of the security of non-nuclear-weapon States were, for example, among the steps enumerated by the eight non-aligned members of the ENDC in their 1966 joint memorandum on non-proliferation, that "could be embodied in a treaty as part of its provisions or as declaration of intention."<sup>2</sup>

With respect to the negative guarantees, i.e., the non-use of nuclear weapons, the Soviet Premier, Mr. Alexei Kosygin, in a message to the ENDC on 1 February 1966, declared the Soviet Government's willingness to include in a non-proliferation Treaty "a clause on the prohibition of the use of nuclear weapons against non-nuclear States parties to the treaty, which

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1 For example, see UN Doc. A/6817, 19 Sept. 1967, Ann. IV, pp. 2-5.

2 See Chapter 2, notes 62-64.

have no nuclear weapons in their territory."<sup>3</sup> The Soviet proposal came to be known as the "Kosygin proposal". After the submission of the first identical treaty drafts of 24 August 1967, both the United Arab Republic (UAR) and Romania submitted formal proposals to include an article on negative guarantees.<sup>4</sup> The latter country reintroduced its previous proposal with an addition in connexion with the second identical treaty drafts of 18 January 1968.<sup>5</sup>

With respect to the positive guarantee, i.e., protection against the use or threat of use of nuclear weapons, the United States' President, Lyndon B. Johnson, said, in a radio-television address on 18 October 1964, after the first Chinese nuclear device explosion of 16 October, that :

"The nations that do not seek national nuclear weapons can be sure that, if they need our strong support against some threat of nuclear blackmail, then they will have it."<sup>6</sup>

A similar pledge was made by President Johnson in his message to the ENDC on 27 January 1966.<sup>7</sup> At the ENDC, Nigeria was the only country to have proposed an article on positive

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3 DCOR, Suppl. for 1966, Doc. DC/228, Ann. 1, Sec. F (ENDC/167, 3 Feb. 1966). At a later date, the Soviet representative at the ENDC explained that the text of such a clause could be drafted, for example, as follows : "The parties to the treaty possessing nuclear weapons undertake not to use nuclear weapons and not to threaten the use of such weapons against States which do not possess nuclear weapons and in whose territory, territorial waters and air space there are no foreign nuclear weapons." ENDC/PV. 267, 23 June 1966, p. 12.

4 Ibid., Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 13 (ENDC/197, 26 Sept. 1967), Article IV-A (UAR) and Sec. 14 (ENDC/199, 19 Oct. 1967), Article III-B (Romania).

5 Ibid., Sec. 40 (ENDC/223/Rev. 1, 1 Mar. 1968), Article VI-A.

6 Documents on Disarmament, 1964, p. 468.

7 DCOR, Suppl. for 1966, Doc. DC/228, Ann. 1, Sec. D (ENDC/165, 27 Jan. 1966).

guarantees. It first proposed it in relation to the first identical treaty drafts of 24 August 1967, and then reintroduced it with changes in form and substance in connexion with the joint treaty draft of 11 March 1968.<sup>8</sup>

The two types of guarantees are not mutually exclusive. They were both excluded, however, from the NPT for reasons we shall evoke in the course of our analysis below. Suffice it to say here that the nuclear-weapon States and some of their allies participating in the NPT negotiations have quite often pointed out that the problem of guarantees was too complicated to be treated in the treaty itself. Real security resided, in their view, in a non-proliferation treaty.<sup>9</sup> In other words, the renunciation of nuclear weapons should not be considered, in their view, as a sacrifice on the part of non-nuclear-weapon States.

Nuclear guarantees were rather being sought by the three nuclear-weapon States participating in the ENDC outside the framework of the NPT and more particularly in the context of the United Nations but in close conjunction with the Treaty. In the meantime, the Treaty of Tlatelolco was concluded in February 1967. Attached to it is an Additional Protocol II of which Article 3, quoted above, contains a sort of a negative guarantee.

On 7 March 1968, the Soviet Union, the United Kingdom and the United States introduced to the ENDC a draft resolution on security assurances that they intended to submit to the UN

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8 Ibid., Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 18 (ENDC/202, 2 Nov. 1967), Article II-A and Sec. 37 (ENDC/220/Rev. 1, 14 Mar. 1968), Article II.

9 For example, see ENDC/PV. 293, 14 Mar. 1967, para. 59 (USSR); ENDC/PV. 319, 3 Aug. 1967, para. 29 (Canada); ENDC/PV. 325, 24 Aug. 1967, para. 28 (United States); and ENDC/PV. 328, 5 Sept. 1967, paras. 17-18 (Bulgaria).

Security Council for its consideration.<sup>10</sup> Moreover, the three States indicated that declarations would be made by them at the Council in conjunction with Security Council action. Elements of those declarations were also revealed by the three States at the ENDC.<sup>11</sup>

As the ENDC adjourned a week later, on 14 March 1968, the Security Council Draft resolution was virtually discussed for the first time at the 22nd resumed session of the General Assembly, which was held during the months of April-June 1968. In order to appease the discontent of a great number of States with the security assurances offered by the three nuclear-weapon States, the preambular paragraph of the NPT quoted above was added as a last preambular paragraph to the 31 May 1968 final revised treaty draft submitted to the First Committee of the Assembly. The paragraph partly drew its language from that of Article 2/4 of the UN Charter.

On 12 June 1968, the day on which the NPT was commended by the Assembly, the three nuclear-weapon States requested, in a letter to the President of the Security Council, an early meeting of the Council to consider the same draft resolution they had earlier introduced at the ENDC.<sup>12</sup> The Council held three meetings to discuss the draft resolution.<sup>13</sup> At the first meeting held on 17 June 1968, the representatives of the three nuclear-weapon States made separate but identical declarations in conjunction with the draft resolution.<sup>14</sup> On 19 June 1968, the

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10 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. II (ENDC/222, 7 Mar. 1968).

11 See ENDC/PV. 375, 11 Mar. 1968. The idea of a declaration at the UN seems to have emanated from the United States. Hearings on Arms Control and Disarmament, p. 22 (William Foster).

12 UN Docs. S/8630, 13 June 1968 and S/8631, 12 June 1968.

13 SCOR, 23rd Yr., 1430th mtg, 17 June 1968; 1431st mtg, 18 June 1968 and 1433rd mtg, 19 June 1968.

14 Ibid., 1430th mtg, 17 June 1968, para. 16 (USSR); para. 29 (UK); and para. 40 (United States).



Council finally adopted the resolution by 10 votes in favour, none against and 5 abstentions.<sup>15</sup>

At the Conference of Non-Nuclear-Weapon States, which was held in August-September 1968, a search for a better security formula was undertaken without tangible results. The Conference has adopted a draft resolution sponsored by the Federal Republic of Germany which had merely reaffirmed certain basic principles and rights enshrined in the UN Charter pertaining, inter alia, to the non-use of force, non-intervention in the internal affairs of States, and individual and collective self-defence.<sup>16</sup> In its declaration, the Conference also stressed the necessity of further steps for "an early solution of the question of security assurances in the nuclear era."<sup>17</sup> In another resolution pertaining to the establishment of nuclear-weapon-free zones, the Conference urged the nuclear-weapon States to sign and ratify Additional Protocol II of the Treaty of Tlatelolco.<sup>18</sup>

At the 23rd session of the UN General Assembly held in 1968, the Soviet Union and the United States, which refrained from participating in the discussions of the Conference of Non-Nuclear-Weapon States in their capacities as observers, stressed the significance of the Security Council resolution and the declarations made in conjunction with it. The resolution was, in

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15 Ibid., 23rd Yr., 1968, Resolutions and Decisions, p. 13. Those voting in favour of the resolution were Canada, China, Denmark, Ethiopia, Hungary, Paraguay, Senegal and the three nuclear-weapon States sponsoring the resolution. Those abstaining were Algeria, Brazil, France, India and Pakistan. Ibid., 1433rd mtg, 19 June 1968, para. 119.

16 Final Document of the Conference of Non-Nuclear-Weapon States (A/CONF.35/10, 1 Oct. 1968), Resolution A, pp. 5-6.

17 Ibid., 0 : Declaration of the Conference of Non-Nuclear-Weapon States, para. 1, p. 20.

18 Ibid., Resolution B, pp. 6-7.

their view, the utmost that could be reached in the prevailing circumstances.<sup>19</sup>

However, search for other measures for strengthening world peace and security, sometimes in close conjunction with the NPT, continued. For example, the 1972 SALT I Agreements<sup>20</sup> and the "Agreement on Prevention of Nuclear War" signed in Washington, D.C. on 22 June 1973 by the Soviet Union and the United States<sup>21</sup> are some concrete results of a much larger effort exerted in the field of nuclear security. Under this chapter we shall refer to the latter agreement. As to the former agreements, we shall revert to them in relation to the application of Article VI of the NPT.

At the 1975 NPT Review Conference, where Security Council resolution 255 was further scrutinized, new proposals were made in the context of negative security assurances for the non-nuclear-weapon States Parties to the NPT. While no decisions were taken on those proposals, the Conference in its Final Declaration stressed the responsibility of all Parties to the Treaty and especially the nuclear-weapon States, to take effective steps to strengthen the security of non-nuclear-weapon States. The Conference also took note of the determination of the Depositary States to honour their statements made in conjunction with Security Council Resolution 255.

Nuclear security guarantees figured as a major issue in the UN General Assembly sessions, which followed the NPT Review Conference, especially at the Tenth Special Session of 1978 devoted to disarmament. The latter called upon the nuclear-weapon States to pursue their efforts to conclude, as appropriate, effective arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons.

<sup>19</sup> For example, see A/C.1 PV. 1611 (prov.), 19 Nov. 1968, p. 13 (United States).

<sup>20</sup> For the texts of the SALT I Agreements, see DOSB, Vol. LXVI, No. 1722, 26 June 1972, pp. 918-921.

<sup>21</sup> For the text of the Agreement, see Ibid., Vol. LXIX, No. 1778, 23 July 1973, pp. 160-161.

Before dealing with Security Council resolution 255, which remains the only global solution reached in connexion with the NPT, a brief discussion of the two types of guarantees ought to be undertaken in order to appreciate the scope and the limitations of the resolution. As the nature of each of the two types of guarantees is different from the other and consequently raising different kinds of problems, each will be studied separately in the following two parts.

## I. The Negative Guarantees

Ever since nuclear weapons were used in Hiroshima and Nagasaki, man has not ceased to fear a recurrence of similar holocausts. The post-World War II era has witnessed a succession of severe crises which have led to the brink of world-wide nuclear conflagration. Fortunately, nuclear weapons were neither used again, nor was their use threatened in any military intervention.<sup>22</sup>

The concept of nuclear deterrence has come to play so far a crucial role in preventing the use or threat of use of nuclear weapons in military interventions. However, full confidence in this concept has never been established. Fears that the concept would break in unforeseen circumstances or as a result of further proliferation of nuclear weapons have led to concrete efforts to ban the use of nuclear weapons through formal undertakings. In fact, efforts to ban the use of nuclear weapons started long before the concept of mutual deterrence had made its impact felt; at a time when the United States was the only nuclear Power. The very first proposal in this respect emanated from the Soviet Union in 1946. As opposed to the Baruch Plan for the creation of an International Atomic Development Authority, a draft convention prohibiting the production and use of

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22 On the restrictions on the use of nuclear threats in intervention, see Schwarz, Confrontation and Intervention in the Modern World, pp. 197-198.

atomic weapons was submitted by the Soviet Union to the newly established UN Atomic Energy Commission.<sup>23</sup>

Since then and throughout the different phases of disarmament negotiations, prohibiting the use of nuclear weapons was a measure strongly backed by the Soviet Union as part of general disarmament plans, as a separate collateral measure, or as part of a non-proliferation treaty. Non-aligned States had also contributed in this domain as evidenced, for example, by the "Ethiopian Resolution" adopted by the UN General Assembly in 1961, the non-aligned proposals at the ENDC and the Additional Protocol II of the Treaty of Tlatelolco. As will be shown below, the United States had nearly always opposed the prohibition of the use of nuclear weapons under any form, except in the latter case, i.e., Additional Protocol II, which, paradoxically as it may seem was not signed by the Soviet Union until 1978. The positions of US allies in Europe and elsewhere varied according to the scope and form of each proposal or scheme.

Without going into a detailed study of the numerous consecutive proposals, UN resolutions and schemes, we shall only briefly discuss the outstanding forms of prohibition of the use of nuclear weapons with special emphasis on the idea of an article within the framework of the NPT and Additional Protocol II of the Treaty of Tlatelolco. Besides these two forms there are the much earlier idea of a convention, which still persists, and declarations.

#### 1. Prohibition by Means of a Convention

The draft convention introduced by the Soviet Union in 1946 was an understandable move reflecting serious worries about Soviet security at a time when the United States had the monopoly of nuclear weapons. Soviet preponderance in conventional

<sup>23</sup> See The United Nations and Disarmament, 1945-1970, pp. 12-14.

weapons in the European scene was felt to have been radically upset by the new weapons. Its drive for prohibiting the use of nuclear weapons had therefore never waned so long as it was still lagging behind the United States in nuclear weaponry. But its more recent endeavours for concluding a convention have been pursued in an atmosphere of strategic parity with the United States. Recent Soviet arguments in favour of such a convention run as follows : the convention would be tantamount to a nuclear non-aggression pact, it would slow down the nuclear arms race, it is instrumental in stopping the proliferation of nuclear weapons, it would be quite possible to liquidate the nuclear arsenals and it would open up wide opportunities for the peaceful uses of atomic energy.<sup>24</sup>

In the 1950s, the United States was, obviously, not willing to give up so quickly the right to use a weapon that seemed to be of a highly military value, and at a time when the Soviets were largely preponderant in conventional weapons and enjoying a growing influence in Eastern and Central Europe. Soviet conventional military might in Europe and/or the incapacity or unwillingness of the European allies of the United States to cope with it, still remain the principal reason for United States' refusal of a prohibition on the use of nuclear weapons. The United States wants, for example, to keep the option of using tactical nuclear weapons to stop a Soviet massive conventional assault in the European theatre. Soviet successive proposals are, therefore mainly looked upon in the context of Soviet designs to weaken and divide the Atlantic Alliance. In fact, US opposition to any general ban on the use of nuclear weapons emanates from a more general strategic concept. The maintenance of mutual deterrence is considered by the US as the most effective way of minimizing the risk of war, and so long

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24 M. Lvov, "Ban Nuclear Weapons", International Affairs (Moscow), No. 1, Jan. 1965, pp. 9-10. See also M. Petrov, "The USSR All-Out to Ban Nuclear Weapons", International Affairs (Moscow), No. 2, Jan. 1969, pp. 3-6.

as such a posture continues, an agreement not to use nuclear weapons, even in self-defence or in retaliation would be deceptive, dangerous and unrealistic.<sup>25</sup>

The right to use nuclear weapons in retaliation to a nuclear attack is accepted, however, by many American critics of the US stand on banning the use of nuclear weapons. Those critics argue in favour of an agreement on no-first-use of nuclear weapons that would allow the US the freedom of action if attacked by nuclear weapons.<sup>26</sup> The beneficial affects of a no-first-use treaty are expected to engender, in their view, an atmosphere of détente and relaxation in which nuclear weapons would not be resorted to in the first place. The beneficial effects mostly stressed are the slowing of the arms race, non-proliferation and satisfying the repeated demands by non-nuclear-weapon States for reciprocity in arms control negotiations. Those in favour of a no-first use usually express the proposal in categorical terms, i.e., without qualifying the non-use undertaking with certain types of weapons or targets.<sup>27</sup>

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25 For an excellent succinct analysis of the grounds upon which the US opposed the non-use and their refutation by a US scholar, see Richard A. Falk, "Renunciation of Nuclear Weapons Use" in Boskey and Willrich, op.cit., Chapter 11, pp. 133-145. The other grounds evoked by Falk are the meaninglessness of non-use unless something is done about nuclear stockpiles; the Hiroshima and Nagasaki complex that prevents the US from adopting a more constructive attitude towards proposals on non-use; and the traditional US reluctance to make broad sweeping commitments that might restrict choice in future international situations.

26 In essence, there is no difference between a general non-use agreement and a no-first-use agreement in case of a violation entailing the use of nuclear weapons. In both cases the other parties would not be bound by the non-use obligation. However, a no-first use agreement is favoured for political reasons. See Mason Willrich, "No First Use of Nuclear Weapons; an Assessment", Orbis, Vol. IX, No. 2, Summer 1965, p. 310.

27 See Falk, "Renunciation of Nuclear Weapons Use", pp. 142-144. For an extensive discussion of no-first-use of nuclear

As a result of the failure to include an article on the non-use of nuclear weapons within the context of the NPT or to couple the latter with a convention on a general prohibition, the idea of a convention continues to persist and is receiving considerable backing by the Soviet Union and non-aligned States. Shortly after the NPT had been opened for signature, the "prohibition of the use of nuclear weapons" figured as the first item in the Soviet memorandum concerning urgent measures to stop the arms race and achieve disarmament submitted to the UN on 5 July 1968.<sup>28</sup>

At the Conference of Non-Nuclear-Weapon States, a group of Latin American States and another group of African States had each submitted to Committee One of the Conference a draft resolution on security guarantees. The Latin American draft was aiming at convening a conference for the conclusion of a multilateral instrument whereby the nuclear-weapon States would undertake to adopt appropriate measures to assure the security

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weapons, see Proposal for No First Use of Nuclear Weapons. Pros and Cons. (Princeton, N.J. : Woodrow Wilson School of Public and International Affairs, Princeton University, 1963) (Center of International Studies, Policy Memorandum No. 28). See also Morton H. Halperin, "A proposal for a Ban on the First Use of Nuclear Weapons", Journal of Arms Control, vol. 1, No. 2, Apr. 1963, pp. 112-123; Willrich "No First Use of Nuclear Weapons; an Assessment", pp. 299-315; and On Minimizing the Use of Nuclear Weapons (Princeton, N.J. : Woodrow Wilson School of Public and International Affairs, Princeton University, 1966) (Center of International Studies, Research Monograph No. 23).

- 28 GAOR, 23rd Sess., Anns. (Vol. 1), a.i. 27, 28, 29, 94 and 96, Doc. A/7134, 8 July 1968. Less than a year before, the Soviet Union introduced a draft convention for the consideration of the 22nd session of the UN General Assembly. Article 1 of the draft stipulates that : "Each Party to this convention gives the solemn undertaking to refrain from using nuclear weapons, from threatening to use them, and from inciting other States to use them." Ibid., 22nd Sess., Anns. (Vol. III), a.i. 96, Doc. A/6834.

of all non-nuclear-weapon States.<sup>29</sup> Likewise, the African draft was aiming at convening a conference, but in that case for the conclusion of a convention or protocol to the NPT through which the nuclear-weapon States would undertake, inter alia, not to attack non-nuclear-weapon States or one another.<sup>30</sup> The latter draft resolution was withdrawn after the former draft had been adopted by Committee One.<sup>31</sup> It later failed, however, to obtain the required two-thirds majority in the Plenary.<sup>32</sup>

Opposition to the Latin American draft came from several quarters and for different reasons. It was opposed to by both Western and Eastern European countries as well as by some non-aligned States. It was feared that the proposed conference would divert attention from the NPT,<sup>33</sup> or would not be attended by all nuclear-weapon States.<sup>34</sup> The climate was not in favour of the proliferation of conferences.<sup>35</sup> In fact, Western opposition can be interpreted in the light of United States' as well as its allies' resistance to the idea of a convention on non-use as explained above. The Eastern European States were probably more worried about the impact of such a conference on future adherence to the NPT. It should be recalled here that for that same reason the Soviet Union in the first place was

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29 A/CONF.35/C.1/L.3/Rev. 2, 24 Sept. 1968. The first version of the draft which was submitted by Brazil mentioned "the conclusion of a General Convention through which the nuclear-weapon States shall undertake to give positive and negative guarantees to all non-nuclear-weapon States." A/CONF.35/C.1/L.3, 13 Sept. 1965.

30 A/CONF.35/C.1/L.4, 17 Sept. 1968.

31 For the results of the vote on the Latin American draft, see A/CONF.35/C.1/SR.22, 26 Sept. 1968, pp. 155-156.

32 For the results of the vote in the Plenary, see A/CONF.35/SR.18, 27 Sept. 1968, pp. 218-219. The result was 39 in favour, 20 against and 25 abstentions.

33 A/CONF.35/C.1/SR.18, 24 Sept., 1968, p. 115 (Bulgaria).

34 Ibid., pp. 118-119 (Canada).

35 For example, see Ibid., p. 124 (Ceylon).



not very happy with the idea of convening a conference of non-nuclear-weapon States.

The only resolution which was adopted on security assurances was the one sponsored by the Federal Republic of Germany of which the first operative paragraph reaffirms :

"(i) the principle, indivisible in its application, of the non-use of force and the prohibition of the threat of force in relations between States by employing nuclear or non-nuclear weapons, and the belief that all States without exception have an equal and inalienable right to enjoy the protection afforded by this principle, recognized under Article 2 of the United Nations Charter".<sup>36</sup>

The significance of this reaffirmation of a principle recognized by the UN Charter is that the principle is interpreted to include the use or threat of use of nuclear weapons, a question which did not arise when the Charter was drafted in the pre-nuclear era.

The resolution, which also reaffirmed certain rights including another interpretation of a UN Charter provision,<sup>37</sup> was opposed to by the Eastern European Countries on the basis that it raised questions of interpretations of the UN Charter which only the UN General Assembly and its competent organs were qualified to deal with, and on the basis that it (the resolution) suited the political interests of the Federal Republic of Germany which did not recognize its new boundaries.<sup>38</sup> The resolution was, in fact, closely related to the Warsaw Pact members' intervention in Czechoslovakia and was, therefore,

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<sup>36</sup> Final Document of the Conference of Non-Nuclear-Weapon States (A/CONF.35/10, 1 Oct. 1968), Resolution A, p. 5. The resolution was adopted with 52 votes in favour, 5 against, and 26 abstentions. A/CONF.35/SR.18, 27 Sept. 1968, p. 222.

<sup>37</sup> The rights referred to are "the right to equality, sovereignty, territorial integrity, non-intervention in internal affairs and self-determination of every State" and the inherent right, recognized under Article 51 of the UN Charter, of individual or collective self-defence.

<sup>38</sup> See A/CONF.35/C.1/SR.16, 23 Sept. 1968, p. 102 (Hungary) and A/CONF.35/C.1/SR.18, 24 Sept. 1968, p. 116 (Poland).

not expected to receive their approval. This explains the abstentions of many countries who did not wish to be involved in matters pertaining to East-West confrontation. A few years later, in 1972, it was the Soviet Union that initiated a similar resolution at the UN General Assembly, as will be referred to in the following section.

However, the idea of a convention re-emerged during the Tenth Special Session of the UN General Assembly devoted to disarmament in 1978. Close to the end of the session India submitted a draft resolution whereby the General Assembly would, inter alia, call for an international convention to prohibit the use of nuclear weapons. India recalled that the Third Conference of Heads of State or Government of Non-aligned Countries held at Lusaka, Zambia, in 1970 had suggested the formulation of such an international convention. Because of the agreement reached at the session that decisions would be taken by consensus, the Indian draft resolution was not pressed for a vote. It was later reintroduced at the 33rd regular session of the Assembly in 1978 and adopted by an overwhelming majority. As this resolution took basically the form of a declaration, it will also be further discussed in the following section.

The question of a convention as a separate means for renouncing the use of nuclear weapons was, in fact, revived by the Soviet Union at the 33rd regular session of the General Assembly, under a new item entitled "Conclusion of an international convention on the strengthening of guarantees of the security of non-nuclear States." The Soviet Union, which submitted a draft of a convention attached to a draft resolution explained that the security of non-nuclear-weapon States could best be served by the conclusion of an international convention the parties to which would be the nuclear-weapon States prepared to grant appropriate guarantees of security to non-nuclear-weapon States, and the latter concerned, which would renounce the production and acquisition of nuclear weapons and had no nuclear weapons on their territory.

Pakistan too, submitted to the same session of the Assembly, an alternative draft resolution to which was also attached a draft of a convention whereby the nuclear-weapon States would pledge not to use or threaten to use nuclear weapons against non-nuclear-weapon States not parties to the nuclear security arrangements of some nuclear-weapon States, and whereby the nuclear-weapon States would undertake to achieve the complete elimination of nuclear weapons in the shortest possible time. Pakistan's concept of guarantees, which would not be extended to non-nuclear-weapon States allied to a nuclear-weapon State even if they had no nuclear weapons on their territory, was almost a mirror reflection of the conclusions reached by The Islamic Conferences of the Foreign Ministers of the Islamic States held at Djeddah in 1975 and at Istanbul in 1976.

Both the United Kingdom and the United States saw no need for an international convention. The latter was of the view that it would be unrealistic to anticipate that a single formulation could be found which would be generally acceptable and meet the diverse security requirements not only of each of the nuclear-weapon States but also of the non-nuclear-weapon States, for many of which relationships with specific nuclear-weapon States were an essential ingredient in their national security. Both countries were in favour instead of unilateral individual declarations made by the nuclear-weapon States as effective means of enhancing the security of non-nuclear-weapon States against the use or threat of use of nuclear weapons.

In light of the discussions which took place in the First Committee of the Assembly, both the Soviet Union and Pakistan revised their draft resolution and resubmitted them without annexing the draft conventions. Both draft resolutions requested the newly established Committee on Disarmament (CD) to consider all proposals made during the 33rd regular session of the Assembly on international arrangements for the strengthening of the security of non-nuclear-weapon States including the conclusion of an international convention. Both drafts were adopted overwhelmingly with the United States and the

United Kingdom voting in favour of the Soviet draft while France and Pakistan, among others, abstained and China voting against. As to the Pakistani resolution, the Soviet Union and the United States were among the 14 countries which abstained and none voted against. The support of the Soviet resolution by the United States and the United Kingdom was made possible by not singling out the convention as the only or basic means of achieving the security of non-nuclear-weapon States. On the other hand, the abstention of each of the United States and the Soviet Union on the Pakistani resolution is apparently due to the Pakistani concept of guarantees pointed out above.

On 5 July 1979, the CD decided to establish for the duration of its 1979 session, an ad hoc Working Group open to all member States of the CD to consider and negotiate on effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons. As a result of its deliberations, the ad hoc Working Group submitted a report to the CD which in its turn included it in its Report to the 34th regular session of the UN General Assembly in 1979.

In its report, the CD pointed out that there was understanding that the work of the Group should be a step-by-step process, the first step being to identify the elements to be considered and negotiated on, the second to negotiate on those elements, and the third to reach agreement through consensus on effective international arrangements.

So far, extensive discussions took place on the elements to be considered and negotiated on. There was broad agreement that these elements can be divided into two general categories: scope and nature of the arrangements, and form of the arrangements, their number and binding character. Without going into the scope and nature of the arrangements which have to be further considered and negotiated by the CD, the latter pointed out that as regards the form of the arrangements, the question of an international convention was widely dis-

cussed. There was no objection, in principle, to the idea of an international convention; however, the difficulties involved were also pointed out.

At the 1979 session of the UN General Assembly, three resolutions were adopted on the issue of security assurances, two of which have capitalized on the conclusion reached by the CD that there was no objection, in principle, to the idea of an international convention, and hence requested the CD in its 1980 session to concentrate on the conclusion of an international convention. One of the resolutions was sponsored by the Soviet Union and its allies and the other by Pakistan and Mali. Both resolutions decided this time to include in the 35th session of the UN General Assembly in 1980 two separate items each highlighting the conclusion of an international convention. As to the third resolution it was sponsored by the United States. For obvious reasons, the resolution while welcoming the report of the CD and requesting it to continue its efforts, did not make any reference to the conclusion reached by the CD on the issue of concluding an international convention. The resolution made reference rather to the statements that the nuclear-weapon States have made on assurances to non-nuclear-weapon States with respect to the use of nuclear weapons,<sup>39</sup> statements that we shall evoke in the following section.

Before concluding our remarks on the convention as a means of prohibiting the use or threat of use of nuclear weapons, it should be made quite clear that the "Agreement on Prevention of Nuclear War" referred to above and signed in Washington, D.C. on 22 June 1973 does not include a negative guarantee. As

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39 For a summary of the discussions that took place in 1978 at the UN General Assembly, see The United Nations Disarmament Yearbook, Volume 3: 1978 (New York: United Nations, 1979), pp. 219-229. As to the report of the CD, see Report of the Committee on Disarmament (Vol. 1), GAOR, 34th Sess. (1979), Suppl. No. 27 (A/34/27), pp. 26-29. For the resolutions adopted by the UN General Assembly in 1979, see UN Docs. A/34/753, 8 Dec. 1979, A/RES/34/85, 14 Jan. 1980 and A/RES/34/86, 17 Jan. 1980 respectively.

explained by Henry Kissinger in a news conference the same day :

"Its purpose is to prevent wars. It is not a renunciation of a particular form of war if war cannot be prevented ... we did not believe it would contribute to peace if we made particular distinctions as to categories of weapons in case of war."<sup>40</sup>

## 2. Prohibition by Means of Declarations

In view of the difficulties encountered in signing a convention, the Soviet Union does not exclude, as a first step, the idea of a declaration by the nuclear-weapon States that they would not be the first to use nuclear weapons.<sup>41</sup>

The Government of the People's Republic of China, on the occasion of its first explosion of an atomic device on 16 October 1964, was the first and the only country so far to have solemnly declared that "at no time and in no circumstances will (it) be the first to use nuclear weapons."<sup>42</sup> The declaration was categorical and was not made conditional on similar undertakings by the other nuclear-weapon States. It was repeated or referred to almost each time China exploded a nuclear device. In October 1964, the Chinese also proposed a summit conference of all the countries of the world to reach, as a first step, "an agreement to the effect that the nuclear Powers and

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40 DOSB, Vol. LXIX, No. 1778, 23 July 1973, p. 146. The Soviet representative at the CCD also explained that the agreement is "a step on the way to the elimination of the threat of an outbreak of nuclear war and the creation of a system of real guarantees of international security." CCD/PV. 609, 3 July 1973, p. 8.

41 For example, see DCOR, Suppl. for 1966, Doc. DC/228, Ann. 1, Sec. F (ENDC/167, 3 Feb. 1966). The document which contains the message of Premier Kosygin to the ENDC on 1 February 1966, includes Soviet Union's readiness to assume immediately an obligation not to be the first to use nuclear weapons, provided that the other nuclear Powers do likewise.

42 See Premier Chou-En-lai's message on 17 October 1964 to the Heads of Government in Peking Review, Vol. VII, No. 43, 23 Oct. 1966, p. 6.

those countries which may soon become nuclear Powers undertake not to use nuclear weapons, neither to use them against non-nuclear countries and nuclear-free zones, nor against each other."<sup>43</sup>

The idea of coupling declarations with proposals for formal agreements received its typical expression in the "Ethiopian Resolution" adopted in 1961. Apart from the question of signing a convention which is dealt with in its second operative paragraph, the resolution contains, in the first place, the following declaration :

"(a) The use of nuclear and thermonuclear weapons is contrary to the spirit, letter and aims of the United Nations and, as such, a direct violation of the Charter of the United Nations;

(b) The use of nuclear and thermonuclear weapons would exceed even the scope of war and cause indiscriminate suffering and destruction to mankind and civilization and, as such, is contrary to the rules of international law and to the laws of humanity;

(c) The use of nuclear and thermonuclear weapons is a war directed not against an enemy or enemies alone but also against mankind in general, since the peoples of the world not involved in such a war will be subjected to all the evils generated by the use of such weapons;

(d) Any State using nuclear and thermonuclear weapons is to be considered as violating the Charter of the United Nations, as acting contrary to the laws of humanity and as committing a crime against mankind and civilization".<sup>44</sup>

The Assembly declaration contributed further to the already existing controversy over the legality of the use of nuclear

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43 Ibid. For first reactions to the Chinese nuclear testing and proposals, see International Negotiations, pp. 12-13.

44 GA Res. 1653(XVI), 24 Nov. 1961. GAOR, 16th Sess. Suppl. No. 17 (A/5100), pp. 4-5. The draft of the resolution was submitted by Ethiopia, together with eleven other African and Asian countries. It was adopted by 55 votes in favour, 20 against and 26 abstentions. See The United Nations and Disarmament, 1945-1970, pp. 152-153.

weapons between those who consider the use of such weapons intrinsically illegal under customary law or general treaties limiting the conduct of war or both, regardless of the circumstances of a particular use, and those who hold that the legality of the use depends in each instance upon the context within which the weapons is to be employed; the context being defined by some in narrow terms and by others in broad terms so that the use is justified; for example, in self-defence against aggression.<sup>45</sup>

Amidst that controversy and in view of the strong opposition the Assembly declaration had encountered by a considerable number of States including the US and NATO allies, it can hardly be said that the declaration has created a legal rule of prohibition.<sup>46</sup> Therefore, the legal status of nuclear weapons remains largely unsettled. However, it must be emphasized that there is a high level of international consensus for a general prohibition of the use of nuclear weapons demonstrated by the invocation of the "Ethiopian Resolution", in successive resolutions calling for the conclusion of a convention. The

45 For a succinct analysis of the divided doctrine and the Assembly declaration, see Eric Stein, "Impact of New Weapons Technology on International Law : Selected Aspects", Collected Courses of the Hague Academy of International Law, vol. 133, 1971 (II), pp. 288-295. See also the survey prepared by the UN Secretariat on Existing Rules of International Law Concerning the Prohibition or Restriction of Use of Specific Weapons (UN Doc. A/9215 (Vol. 1), 7 Nov. 1973, Chapter II, Part I, Section 5, pp. 147-165). For a profound understanding of the issues involved in the legality of nuclear weapons, see Georg Schwarzenberger, The Legality of Nuclear Weapons (London : Stevens, 1958); Nagendra Singh, Nuclear Weapons and International Law (London : Stevens, 1959); and Richard Falk, Legal Order in a Violent World (Princeton, N.J. : Princeton University Press, 1968), pp. 404-413.

46 On the law-creating capacity of the UN General Assembly, see Rosalyn Higgins, The Development of International Law Through the Political Organs of the United Nations (London : Oxford University Press, 1963), pp. 1-10 and Jorge Castañeda, Legal Effects of United Nations Resolutions (New York : Columbia University Press, 1969).



resolution was also invoked in another declaration adopted by the UN General Assembly at its 27th session in 1972 in relation to a Soviet proposed item on "non-use of force in international relations and permanent prohibition of the use of nuclear weapons." The result of the vote on this latter declaration, which was 73 to 4 with 46 abstentions, showed that overt opposition to a general prohibition was in the decline.<sup>47</sup> At the 1975 NPT Review Conference the Soviet Union and its allies urged that the UN Security Council take appropriate measures for the full implementation of the declaration of the General Assembly.

At the Tenth Special Session of the UN General Assembly devoted to disarmament in 1978, India was much closer than the Soviet Union to the letter and spirit of the "Ethiopian Resolution" of 1961. In its aforementioned draft resolution submitted to the Special Session, the General Assembly would, inter alia, declare that the use of nuclear weapons would be a violation of the Charter of the United Nations and a crime against humanity. India's aborted initiative at the Special Session was pursued at the following 33rd regular session of the Assembly, where with the support of a great number of non-aligned countries secured the adoption of a resolution whereby the General Assembly, inter alia, declares that "the use of nuclear weapons will be a violation of the Charter of the United Nations and a crime against humanity" and that "the use of nuclear weapons should therefore be prohibited, pending nuclear disarmament." Although the resolution was adopted by a fairly large majority, it was voted against by Western countries including the United States and the United Kingdom. Various other countries including the Soviet Union and its allies abstained. China did not participate in the vote.

The United States reiterated its known positions on the question of non-use of nuclear weapons. It pointed out, for example, that its negative vote was based, in large part, on

<sup>47</sup> See GAOR, 27th Sess., Anns., a.i. 25. For a summary of that item, see The United Nations and Disarmament, 1970-1975, Chapter VII.

the declaration which purported to outlaw the use of nuclear weapons, under any circumstances, as a violation of the UN Charter. In its view the Charter did not outlaw nuclear means for deterrence or defence against attack. While the facts of nuclear deterrence were not pleasant, the United States commented that it could not be overlooked that in many areas of the world nuclear weapons were part of the security arrangements that had kept the peace. The United Kingdom, likewise, advanced similar arguments.

As to the Soviet Union, it was in favour of its own approach sanctioned by the UN General Assembly in 1972. In its view, the question of the prohibition of the use of nuclear weapons in the Indian resolution was artificially divorced from the question of the adoption of international political and legal measures to strengthen security for all States and from the question of the non-use of force by States in international relations.

China observed that the Indian resolution made no reference to the fundamental question that pending the complete prohibition and thorough destruction of nuclear weapons, the two super-Powers should be the first to undertake unconditionally that at no time and under no circumstances would they use nuclear weapons against non-nuclear-weapon States or nuclear-weapon-free zones, and should proceed forthwith to reduce substantially their nuclear weapons.

At the Tenth Special Session of the UN General Assembly, the question of security assurances to non-nuclear-weapon States was dealt with by the nuclear-weapon States in declarations made on the questions of non-proliferation of nuclear weapons and of nuclear-weapon-free zones.

The Soviet Union declared that it would never use nuclear weapons against those countries where there were no such weapons at present and called upon the other nuclear Powers to do the same. The Soviet representative also recalled that President Brezhnev had quite recently declared that: "We are against the use of nuclear weapons; only extraordinary

circumstances - aggression against our country or its allies by another nuclear Power - could compel us to resort to this extreme means of self-defence." (Emphasis added.)

Late in the session, the representative of the United Kingdom stated on behalf of his government that it formally gave the assurance to non-nuclear-weapon States which were Parties to the NPT or other internationally binding commitments not to manufacture or acquire nuclear explosive devices, that it would not use nuclear weapons against such States except in the case of an actual attack on the United Kingdom, its dependent territories, its armed forces or its allies by such a State in association or alliance with a nuclear-weapon State.

The United States representative called attention to President Carter's declaration which had been announced by the Secretary of State on 12 June 1978 to the effect that the United States will not use nuclear weapons against any non-nuclear-weapon State Party to the NPT or any comparable internationally binding commitment not to acquire nuclear explosive devices, except in the case of an attack on the United States, its territories or armed forces, or its allies, by such a State allied to a nuclear-weapon State or associated with a nuclear-weapon State in carrying out or sustaining the attack.

France said that a decision by the States of a region to preserve a nuclear-free status should entail an obligation for nuclear-weapon States not to seek a military advantage from the situation and in particular preclude any use or threat of the use of nuclear weapons against States that were part of nuclear-free zones. In this respect, France was in favour of a case by case guarantees rather than an all englobing declaration.

As to China, it reiterated its position never to be the first to use nuclear weapons and in favour of a non-use agreement.

Two paragraphs of the Final Document of the Special Session, one in the Declaration and the other in the Programme of

Action, contain provisions, agreed to by consensus, which refer to the declarations made by the nuclear-weapon States and call for the strengthening of the security of non-nuclear-weapon States.<sup>48</sup>

### 3. Prohibition by Means of an Article in the NPT

The idea of linking a non-use undertaking with a non-proliferation treaty had first found its way among non-aligned countries. As one non-aligned representative pointed out in the first Committee of the UN General Assembly in 1965 :

"An indispensable element in any non-proliferation measure ... was a firm undertaking with adequate guarantees by the nuclear Powers not to use nuclear weapons against non-nuclear Powers in any circumstances whatsoever, or to threaten to use them."<sup>49</sup>

The "Kosygin proposal", earlier quoted above, did not go that far in its proposed prohibition. The guarantee was limited to the parties to the treaty and provided that they had no nuclear weapons in their territory. It was out of the question, in the Soviet view, to extend a renunciation of use undertaken in the context of a non-proliferation treaty to the benefit of countries refusing to renounce the acquisition of nuclear weapons. As to the second condition, it was obvious that the absence of nuclear weapons in the territory of non-nuclear-weapon States was meant to be a total one excluding even a temporary presence (e.g. transit). It should be recalled that the possibility of transitting nuclear weapons under the provisions of the Treaty of Tlatelolco was a main reason for Soviet delay in signing the Treaty's Additional Protocol II.<sup>50</sup>

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48 For a summary of the discussions on these issues at the Special Session and the 33rd Regular Session of the UN General Assembly, see The United Nations Disarmament Yearbook, Vol. 3: 1978, pp. 164-165 and Chapter XI. See also Appendix 22 to this study, paragraphs 32 and 59.

49 GAOR, 20th Sess. 1st Cttee, 1365th mtg, 19 Oct. 1965, para. 19 (Nigeria).

50 See Chapter 5.

The second condition is defended on the ground that a non-nuclear-weapon State having nuclear weapons stocked in its territory is liable to become a nuclear Power at any moment if the State which maintains the stocks transfer their disposal to the territorial State.<sup>51</sup> Moreover, in the event of a serious international crisis, it is not inconceivable that the military authorities of the territorial State might take over the weapons by force. Moreover, a nuclear-weapon stockpile is a potential source of nuclear danger which could trigger off nuclear aggression in the event of a crisis. Finally, to give a non-nuclear weapon State, having nuclear weapons on its territory, the benefit of a negative guarantee would amount to giving the nuclear-weapon State owning the weapons a considerable advantage. The same could be said, it was argued, in case of transit.<sup>52</sup>

The "Kosygin proposal" was not welcomed by the United States and some of its NATO allies. The proposal was generally looked upon as combining two favourite Soviet foreign policy themes : aiming at the Federal Republic of Germany which has American nuclear weapons on its territory and at world public opinion in favour of non-use and unsympathetic to United States' reluctance in this regard.<sup>53</sup>

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51 As previously mentioned in Chapter 5, the US conceded that the Treaty "does not deal with arrangements for deployment of nuclear weapons within allied territory as these do not involve any transfer of nuclear weapons or control over them unless and until a decision were made to go to war, at which time the treaty would no longer be controlling." (Emphasis added.) Hearings on NPT, 1968, pp. 262-263.

52 See Jaroslav Zourek, "Conclusion of an International Convention Under Which Nuclear-Weapon States Undertake Not to Use or Threaten to Use Nuclear Weapons Against States Which Have Unconditionally Renounced the Production, Acquisition and Use of Nuclear Weapons", Conference of Non-Nuclear Weapon States, Geneva, 1968 (A/CONF.35/Doc. 8, 9 July 1968), para. 26.

53 Willrich, Non-Proliferation Treaty, p. 167.

United States' reasons for refusing a negative guarantee undertaking within the context of the NPT lacked clarity during the ENDC debates. The explanations given were of a vague nature and related to the general issue of security assurances. The difficulty of the issue and the need to examine it in the context of an action relating to the United Nations were often invoked.<sup>54</sup> United States' allies, members of the ENDC, were more outspoken. Italy and Canada raised some concrete objections to the "Kosygin proposal". The problem of verifying in what countries nuclear weapons were or were not stationed was considered to be a difficult one to solve. The proposal was also found to discriminate against non-nuclear-weapon States members of NATO which have nuclear weapons on their territory.<sup>55</sup>

The "Kosygin proposal" was widely welcomed by the non-aligned States members of the ENDC.<sup>56</sup> In their 1966 joint memorandum on non-proliferation, banning the use of nuclear weapons was one of the steps mentioned that could be embodied in a non-proliferation treaty as part of its provisions.<sup>57</sup>

At its 21st session in 1966, the UN General Assembly adopted, with a very large majority, a draft resolution sponsored by more than 40 non-nuclear-weapon States, which had included a request to the ENDC "to consider urgently the proposal that the nuclear-weapon Powers should give an assurance that they will not use, or threaten to use, nuclear weapons against non-nuclear-weapon States without nuclear weapons on their terri-

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54 For example, see ENDC/PV. 368, 21 Feb. 1968, paras. 17-18.

55 See ENDC/PV. 239, 10 Feb. 1966, p. 12 (Italy); ENDC/PV. 241, 17 Feb. 1966, pp. 12-13 (Canada); GAOR, 21st Sess. 1st Cttee, 1443rd mtg, 7 Nov. 1966, para. 9 (Italy); and Ibid., 1444th mtg, 7 Nov. 1966, para. 34 (Canada).

56 For example, see ENDC/PV. 237, 3 Feb. 1966, p. 34 (Nigeria); ENDC/PV. 240, 15 Feb. 1966, p. 15 (India); ENDC/PV. 245, 3 Mar. 1966, p. 13 (UAR); and ENDC/PV. 274, 19 July 1966, p. 15 (Mexico).

57 See Chapter 2, notes 62-64.

tories, and any other proposals that have been or may be made for the solution of this problem".<sup>58</sup>

The resolution was criticised by the United States and some of its allies. They voted, however, in favour of the resolution as a whole. The formula was not exactly that of the "Kosygin proposal". It differed in two respects. It was not necessarily to become an integral part of a non-proliferation treaty and consequently it was to the benefit of non-nuclear-weapon States whether or not parties to such a treaty.<sup>59</sup>

After the submission of the 24 August 1967 identical treaty drafts and the failure to include an article on negative guarantees, both the United Arab Republic and Romania submitted each a draft article for the consideration of the ENDC. In its aid-mémoire to the ENDC, the Swiss Government also suggested a formula. It was quite significant that, as far as the beneficiaries of the guarantees were concerned, each of the three proposals differed from the 1966 General Assembly formula.

The UAR proposal corresponded to the Kosygin formula, although the UAR delegation pointed out that its proposal was mainly based on the 1966 resolution of the General Assembly. According to the UAR proposed article, only non-nuclear-weapon States party to a non-proliferation treaty which have no nuclear weapons on their territories would have benefitted from the guarantee.<sup>60</sup> The UAR delegation was merely convinced of the

58 GA Res. 2153 A(XXI), 17 Nov. 1966. GAOR, 21st Sess., Suppl. No. 16 (A/6316), pp. 9-10. For the results of the vote in the Assembly, see *Ibid.*, Plen. Mtgs (Vol. III), 1469th mtg, 17 Nov. 1966, para. 65.

59 The first version of the draft resolution had even mentioned non-nuclear-weapon States without singling out those which had no nuclear weapons on their territories. GAOR, 21st Sess., Ann. (Vol. II), a.i. 36, Doc. A/6509, 14 Nov. 1966, para. 4.

60 See DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 13 (ENDC/197, 26 Sept. 1967), Article IV-A and ENDC/PV. 333, 26 Sept. 1967, paras. 21-31. See also an earlier statement on the necessity of an article in ENDC/PV. 294, 16 Mar. 1967, paras. 27-30.

soundness of the Kosygin formula and wished to fill the gap left open in the 1967 identical treaty drafts.

The Romanian proposal was to benefit non-nuclear-weapon States undertaking not to manufacture or acquire nuclear weapons. It was, therefore, not limited to the parties to a non-proliferation treaty and it was irrelevant if the non-nuclear-weapon States had or had not nuclear weapons on their territories. Apparently, the proposal aimed to meet the objections raised by the NATO allies. The proposal included also an undertaking by the States party to the treaty to establish through the Security Council an appropriate procedure to ensure that the guarantee would be fulfilled.<sup>61</sup>

As to the Swiss suggestion, the beneficiaries of the non-use undertaking were to be the non-nuclear-weapon States party to the non-proliferation treaty. The guarantee was looked upon as a means to limit the juridical discrimination between States established by the treaty.<sup>62</sup>

As a result of a repeated failure to include an article on negative guarantees in the joint treaty draft submitted to the UN General Assembly at its 22nd resumed session in 1968, other variations of negative guarantees were suggested by some non-nuclear-weapon States, such as prohibiting the use of nuclear weapons not only against non-nuclear-weapon States party to a NPT but also outlawing such use by the nuclear Powers against one another.

In spite of all those proposals and suggestions no negative guarantees were incorporated in the text of the Treaty. The only gesture made in order to appease the discontent of the

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61 See DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 14 (ENDC/199, 19 Oct. 1967), Article III and Sec. 40 (ENDC/223/Rev. 1, 1 Mar. 1968), Article VI-A. See also ENDC/PV. 344, 2 Nov. 1967, paras. 22-27 and ENDC/PV. 376, 11 Mar. 1968, para. 30.

62 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 21 (ENDC/204, 24 Nov. 1967), para. 6.



non-nuclear-weapon States was the inclusion of the aforementioned last preambular paragraph in the final revised treaty draft of 31 May 1968 which merely recalled that, in accordance with the UN Charter, "States must refrain in their international relations from the threat of the use of force against the territorial integrity or political independence of any State..."

United States' reluctance to include an article on negative guarantees could also be related to its general strategic conception and more particularly to its determination to retain its freedom of action in the European theatre. This would bring us to another theatre, that of Latin America, where a non-use undertaking to the benefit of the Contracting Parties of the Treaty of Tlatelolco was possible for the United States and other nuclear-weapon States to make.

Before embarking on Additional Protocol II of the Treaty of Tlatelolco, it must be pointed out that at the 1975 NPT Review Conference a number of non-nuclear-weapon States, led by Romania, eager to remedy the lack of an article in the NPT on negative security assurances, tried unsuccessfully to attach a protocol to the NPT (Additional Protocol III) whereby the nuclear-weapon States Parties to the NPT would solemnly undertake never and under no circumstances to use or threaten to use nuclear weapons against non-nuclear-weapon States Parties to the Treaty whose territories are completely free from nuclear weapons and to refrain from first use of nuclear weapons against any other non-nuclear-weapon States Parties to the Treaty, i.e. States having nuclear weapons on their territories. The Protocol which included other provisions that we shall refer to later, would have been subject to ratification by the three Depositary Governments of the NPT and would have entered into force when ratified by two of them. The duration of the Protocol and provisions for withdrawal would have been the same as for the NPT itself.

Both the United States and the United Kingdom objected to such an approach, which was in line with their previous posi-

tions against the inclusion of an article in the NPT. Surprisingly, the Soviet Union criticized Additional Protocol III on security assurances as imposing obligations on only a number of nuclear-weapon States, requiring the participation of all nuclear-weapon States if such undertakings were to be meaningful. Thus, it appeared that the Soviet Union had abandoned the "Kosygin proposal." Inconsistent also with its new position at the NPT Review Conference, the Soviet Union and its allies in the Warsaw Pact at their meeting just a year later at Bucharest proposed a draft treaty on the prohibition of first use of nuclear weapons in the context of the Conference of Security and Co-operation in Europe which would have excluded the Chinese.<sup>63</sup>

#### 4. Prohibition by Means of Denuclearization: Additional Protocol II of the Treaty of Tlatelolco

The main purpose of establishing a denuclearized zone is to guarantee its immunity from the use of nuclear weapons. Therefore, the co-operation of the nuclear-weapon States is essential to ensure the viability of such a zone. In 1966, the UN General Assembly called upon all nuclear-weapon Powers to refrain from the use, or the threat of use, of nuclear weapons against States which might conclude regional treaties in order to ensure the total absence of nuclear weapons.<sup>64</sup>

In order to secure the co-operation of the nuclear-weapon States, the drafters of the Treaty of Tlatelolco opted for a protocol annexed to it and which would remain in force for the same duration as that of the Treaty. Other procedures of a non legally binding nature, such as unilateral declarations or the

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63 For the Text of Additional Protocol III, see Doc. NPT/CONF/L.4/Rev. 1 in Doc. NPT/CONF/35/I, Ann. II, pp. 9-11. For the text of Warsaw Pact draft meeting, see Documents on Disarmament, 1976 (Pub. No. 97, Dec. 1978) (Washington, D.C.: US GPO, 1978), pp. 855-856.

64 GA Res. 2153 A(XXI), 17 Nov. 1966 (3rd operative paragraph). GAOR, 21st Sess., Suppl. No. 16 (A/6316), p. 10.

adoption by the UN General Assembly of a sui generis resolution, were shelved after long and exhaustive discussions.<sup>65</sup>

Additional Protocol II contains three obligations to be assumed by the signatories : To fully respect the statute of denuclearization of Latin America in respect of warlike purposes as defined, delimited and set forth in the Treaty of Tlatelolco; not to contribute in any way to the performance of acts involving a violation of the obligations of Article 1 of the Treaty in the territories to which the Treaty applies; and not to use or threaten to use nuclear weapons against the Contracting Parties of the Treaty.<sup>66</sup> It is this latter obligation which falls within the scope of our analysis of negative guarantees.

The guarantors are obviously the nuclear-weapon States. At the first UN General Assembly session following the Treaty's opening for signature on 14 February 1967, the nuclear-weapon States were invited by the Assembly to sign and ratify the Protocol as soon as possible.<sup>67</sup> At the Conference of Non-Nuclear-Weapon States, nuclear-weapon States were urged to comply in full with the 1967 Assembly resolution.<sup>68</sup> Ever since

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65 See Mexico, "Establishment of Nuclear-Free Zones. Working Document", Conference of Non-Nuclear-Weapon States, Geneva, 1968 (A/CONF.35/Doc. 16, 22 Aug. 1968), p. 13 and Alfonso Garcia Robles, "Mesures de désarmement dans des zones particulières : le traité visant l'interdiction des armes nucléaires en Amérique Latine", Recueil des Cours de l'Académie de Droit International de La Haye, Tome 133, 1971 (II), pp. 66 and 81. For the text of the sui generis resolution, see Garcia Robles, The Denuclearization of Latin America, pp. 131-132.

66 See Appendix 8.

67 GE Res. 2286(XXII), 5 Dec. 1967 (4th operative paragraph). GAOR, 22nd Sess., Suppl. No. 16 (A/6716), p. 13.

68 Final Document of the Conference of Non-Nuclear-Weapon States (A/CONF.35/10, 1 Oct. 1968), Resolution B (B), pp. 6-7. The draft of the resolution was submitted to Committee One of the Conference by Mexico and 15 other Latin American countries. A/CONF.35/C.1/L.5/Rev. 1, 21 Sept. 1968.

the 25th session of the Assembly, the question of the implementation of General Assembly resolutions concerning the signature and ratification of the Protocol appeared as a separate item on the Assembly's agenda. It remained so until the Soviet Union had ratified the protocol in 1979.<sup>69</sup>

The United Kingdom was the first country to sign as well as to ratify the Protocol, on 20 December 1967 and 11 December 1969, respectively. The United States followed by signing it on 1 April 1968 and then ratifying it on 12 May 1971. When signing and ratifying the Protocol, both the United Kingdom and the United States made statements of understanding which were of an interpretative nature.<sup>70</sup> The statements, which were promptly transmitted to the Contracting Parties by the Mexican Government acting in its capacity as Depositary Government, met no objections.<sup>71</sup>

In view of constant United States' opposition to a general prohibition on the use or threat of use of nuclear weapons and its rejection of a formal renunciation in the context of the NPT, its ratification of a protocol containing a non-use undertaking ought to be explained.

At the hearings held by the US Senate Committee on Foreign Relations on Additional Protocol II, Admiral Thomas Moorer, the Chairman of the Joint Chiefs of Staff (JCS), explained that "the JCS do not generally favor a nonuse nuclear weapon pro-

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69 See UN Doc. A/RES/34/74, 26 Dec. 1979.

70 See SIPRI Yearbook 1973, pp. 466-467 and 470-472. It is to be noticed that the Treaty of Tlatelolco is not subject to reservations (Article 27).

71 United States' delay in ratifying the Protocol was due to its wish to find out if the interpretative statement made upon signature would be accepted by the Contracting Parties. See US Congress, Senate, Committee on Foreign Relations, Hearings : Additional Protocol II to the Latin American Nuclear Free Zone Treaty, 91st Congress, 2nd Session (Washington : US Government Printing Office, 1971), p. 9 (Charles van Doren, Deputy General Counsel, US ACDA), hereinafter cited as Hearings on Additional Protocol II.

vision in any agreement. This is so since such an undertaking could have an adverse effect upon the credibility of our nuclear deterrence. We are willing, however, to apply such a non-use provision to Latin America because of the historic and special relationship that Latin America has to the United States and because of the traditional solidarity and mutual security interests between ourselves and our good neighbors to the south."<sup>72</sup>

The security interests of the United States in signing the Protocol resides, as explained in the aforementioned hearings, on two premises. The first is that the Treaty of Tlatelolco prevents the type of deployment of nuclear weapons that occurred in the Cuban missile crisis, and provides for verification of compliance. Secondly, the Treaty complements the efforts to prevent the proliferation of nuclear weapons in several ways, such as being in force for States that have not yet ratified the NPT.<sup>73</sup>

Other reasons invoked were the difficulty of conceiving of circumstances in which the United States would find it in its interest to use or threaten to use nuclear weapons against a Latin American Party to the Treaty which was abiding by its obligations thereunder, and the belief that US ratification would be an inducement to Latin American countries to sign and ratify the Treaty.<sup>74</sup> The concept of balance was also conceded to in the Latin American case. As put by one US official, the non-use undertaking gives the Latin Americans a reassurance that if they give up the option of having nuclear weapons themselves such weapons will not be used against them.<sup>75</sup>

<sup>72</sup> Ibid., p. 39.

<sup>73</sup> Ibid., p. 4 (Charles A. Meyer, Assistant Secretary of State for Inter-American Affairs).

<sup>74</sup> Ibid., pp. 20 and 28 (Admiral William Lemos, Director, Policy Plans, Office of Assistant Secretary for Defence).

<sup>75</sup> Ibid., p. 8 (Charles van Doren). See also p. 20 on the reciprocity of the undertakings.

In essence, it was possible for the United States to accept a non-use undertaking with respect to the Latin American States because the continent is peripheral to the mutual deterrence system.<sup>76</sup> However, United States' acceptance is not without restrictive interpretations of its obligations. But before dealing with those obligations, the positions of the three other nuclear-weapon States should be clarified.

France signed, after some hesitation, Additional Protocol II on 18 July 1973. It had promised to do so during the visit paid to France by Luis Echeverria, the President of Mexico, in April 1973.<sup>77</sup> France's hesitation was due, apparently, to the vehement campaign launched by some Latin American States against its nuclear testing in the Pacific (Mururoa).

In the same month, April 1973, the President of Mexico also paid a visit to the People's Republic of China setting China's signature of Additional Protocol II as one of his main objectives.<sup>78</sup>

In 1966, while the Treaty of Tlatelolco was still in the process of negotiations, the Chinese Government noted that all the activities in this connection were closely linked to a UN General Assembly resolution. Inasmuch as the UN had violated all the rights of the People's Republic of China in that organisation, the Chinese Government could not participate in its activities and was, therefore, not in a position to support the Latin American Treaty. However, the 16 October 1964 declaration, that China will never at any time and under any circumstances be the first to use nuclear weapons, was recalled.<sup>79</sup>

76 E. Young, A Farewell to Arms Control?, pp. 129-130.

77 See Le Monde, 10 Apr. 1973 and 20 July 1973. France ratified the Protocol on 22 March 1974.

78 Ibid., 24 Apr. 1973.

79 See the second report of the Negotiating Committee of the Preparatory Commission for the Denuclearization of Latin America concerning informal contacts with the Government of the People's Republic of China in Garcia Robles, The Denuclearization of Latin America, pp. 154-158.

After the Chinese representation in the United Nations was settled in 1971 in favour of the People's Republic of China, a specific undertaking was given by China's Minister for Foreign Affairs on 14 November 1972 to the effect that "China will never use or threaten to use nuclear weapons against non-nuclear Latin American countries and the Latin American nuclear-weapon-free zone; nor will China test, manufacture, produce, stockpile, install or deploy nuclear weapons in these countries or in this zone, or send her means of transportation and delivery carrying nuclear weapons to cross the territory, territorial sea or air space of Latin American countries." The undertaking was reiterated in the statement made on behalf of the Chinese Government upon the signature of Additional Protocol II by China on 21 August 1973 in Mexico City.<sup>80</sup>

With respect to the commitment concerning the transit of nuclear weapons, the Chinese Government is unilaterally waiving a right not prohibited by the terms of the Treaty. It has even held, in the statement of 21 August 1973, that in order that Latin America may truly become a nuclear-weapon-free zone, all nuclear countries must be asked to undertake to prohibit the transit of nuclear weapons and to dismantle all foreign military bases. The same statement has also pointed out that China's signature "does not imply any change whatsoever in China's principled stand on the disarmament and nuclear weapons issue and, in particular, does not affect the Chinese Government's consistent stand against the treaty on non-proliferation of nuclear weapons and the partial nuclear test ban treaty".<sup>81</sup>

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80 See UN Doc. A/9137, 30 Aug. 1973. In the communiqué issued at the end of the visit of the President of Mexico to China, the Chinese Government stated that it was making the necessary preparations for signing as soon as possible the Protocol. Peking Review, Vol. 16, Nov. 17, 27 Apr. 1973, p. 6. China ratified the Protocol on 11 June 1974.

81 UN Doc. A/9137, 30 Aug. 1973. China's position on the NPT will be evoked in Chapter 11.

The signature of Additional Protocol II by both France and China was therefore a great success for Mexican diplomacy. On the other hand, this diplomacy had failed then to secure Soviet adherence.<sup>82</sup> As we have earlier demonstrated, the Soviet Union is an avowed advocate of prohibiting the use of nuclear-weapons. The Treaty of Tlatelolco has put it, however, in deep confrontation with delicate strategic and legal issues. In Chapter 5, we had the opportunity to evoke for the first time two of these issues, namely the controversy over the right of the Contracting Parties to proceed with peaceful nuclear explosions and the absence of provisions prohibiting the transit of nuclear weapons. The transit has been left to be governed by the principles and rules of international law; according to which it is for the territorial State, in the free exercise of its sovereignty, to grant or deny permission for such transit in each individual case.<sup>83</sup> The Soviet Union considers that such a transit could serve as a screen for the deployment as well as for the use of nuclear weapons from the territory of the nuclear-weapon-free zone. A third issue is the definition of the zone of application of the Treaty by virtue of its Article 4 which is considered by the Soviet Union not to be in accordance with the accepted norms of international law because, in certain circumstances, the zone extends for hundreds of kilometers beyond the territorial waters of the Contracting Parties.<sup>84</sup>

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82 For example, see the exchange of arguments and counter arguments between the Soviet Union and Mexico in CCD/PV. 551, 21 Mar. 1972, pp. 10-18 and CCD/PV. 553, 28 Mar. 1972, pp. 33-52.

83 See the final act of the fourth session of the Preparatory Commission for the Denuclearization of Latin America in DCOR, Suppl. for 1967 and 1968, Docs. 230 and Add. 1, Ann. IV, Sec. 2 (ENDC/186, 21 Feb. 1967).

84 For a good explanation of the Soviet position, see the Soviet statement and intervention in CCD/PV. 553, 28 Mar. 1972, pp. 33-41. See also the Soviet statement at the Security Council session held in Panama in March 1973. S/PV. 1700 (prov.), 19 Mar. 1973, pp. 76-77. For Mexico's counter



Soviet reluctance to sign the Protocol has also been explained in the United States in the context of Soviet special relations with Cuba.<sup>85</sup> The latter has refused to become a party to the Treaty until the withdrawal of and disbandment of all military bases established in Latin America by the United States including "the many bases equipped with atomic or conventional weapons located in Puerto Rico and those existing in the Panama Canal Zone and in Guantanamo",<sup>86</sup> and until the Treaty "covers also the denuclearization of the only nuclear Power in the hemisphere."<sup>87</sup> Fear that the Treaty of Tlatelolco may induce some Latin American countries not to sign the NPT has also been given by the United States as an explanation of Soviet reluctance.<sup>88</sup>

The Soviet Union declared, however, its readiness to undertake to respect the status of Mexico as a zone completely free from nuclear weapons provided that the other nuclear Powers would undertake similar obligations. This Soviet readiness was due to the fact that the Government of Mexico had no intention to allow the transit of nuclear weapons through its territory and that the limit of its territorial waters had been established then at twelve nautical miles. If other Latin American States followed the Mexican example, the Soviet Union

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arguments, see CCD/PV. 551, 21 Mar. 1972, pp. 10-18 and CCD/PV. 553, 28 Mar. 1972, pp. 41-52.

85 See Hearings on Additional Protocol II, p. 11.

86 A/C.1/PV. 1538 (prov.), 28 Nov. 1967, p. 72. The US Government contends that the Commonwealth of Puerto Rico is not part of Latin America because of its integral relationship with the US. The Virgin Islands are also considered a US territory. With respect to the Panama Canal Zone and Guantanamo, the US expressed readiness to include both in the nuclear free zone if the transit rights would not be affected in the Zone and if Cuba participates. For an analysis of Protocol I and the US position, see Robinson, loc. cit., pp. 394-398. See also Hearings on Additional Protocol II, p. 13.

87 S/PV. 1696 (prov.), 15 Mar. 1973, p. 76.

88 Hearings on Additional Protocol II, p. 11.

would be ready to undertake the same obligation. The Soviet suggested procedure of formulating a series of unilateral declarations was not welcomed by Mexico because it would defeat the purpose of Additional Protocol II.<sup>89</sup>

Upon signature of Additional Protocol II in 1978, the Soviet Union stated that signing "does not in any way signify recognition of the possibility of the force of the Treaty as provided in Article 4(2) being extended beyond the territories of the States parties to the Treaty, including air space and territorial waters as defined in accordance with international law. With regard to the reference in Article 3 of the Treaty to "its own legislation" in connection with the territorial waters, air space and any other space over which the states parties to the Treaty exercise sovereignty, the signing of the Protocol by the Soviet Union does not signify recognition of their claims to the exercise of sovereignty which are contrary to generally accepted standards of international law."<sup>90</sup>

Turning now to the guaranteed States benefitting from the non-use undertaking, Article 3 of Additional Protocol II clearly indicates that they are the Contracting Parties to the Treaty of Tlatelolco. This means that the undertaking applies to those for whom the Treaty is in force. For example, Brazil signed and ratified the Treaty. But upon ratification it stated that it did not waive the requirements laid down in Article 28 of the Treaty for the Treaty's entry into force.<sup>91</sup> The Treaty was, therefore, not in force for Brazil and, consequently, it might not benefit from the non-use undertaking. It is to be noticed,

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89 See CCD/PV. 553, 28 Mar. 1972, pp. 40-41 and 46. It should also be recalled that Mexico interprets the Treaty of Tlatelolco as excluding the right of the Contracting Parties from carrying out themselves and by their own means peaceful nuclear explosions.

90 SIPRI Yearbook 1979, pp. 618-619 (footnote 11).

91 Ibid., p. 618 (note 4). For the text of Article 28, see Appendix 8.

however, that China has undertaken in its August 1973 statement not to use or threaten to use nuclear weapons against non-nuclear Latin American countries and the Latin American nuclear-weapon-free zone. This means that the undertaking, virtually extends unconditionally to the whole zone of application as delimited in Article 4 of the Treaty without the fulfilment of the requirements of Article 28, whether or not they have been waived. The Chinese position conforms with its basic position never to be the first to use nuclear weapons.

The undertaking in Article 3 does not benefit the nuclear-weapon States signatories of the Protocol because they are not Contracting Parties to the Treaty. The same applies for the signatories of Additional Protocol I, i.e. those extra-continental or continental States which, de jure or de facto, are internationally responsible for territories laying within the limits of the geographical zone established by the Treaty. It has been signed and ratified by the United Kingdom and the Netherlands. The United States and France have signed it but by mid-December 1979 they have not yet ratified it. It follows, in principle, that dependent territories too would not benefit from the non-use undertaking under Protocol II. To correct this inequity, which seems to have been the result of a drafting oversight, both the United States and the United Kingdom, in their statements of understanding, extended their non-use undertakings to such territories (but not to the signatories of Additional Protocol I).<sup>92</sup>

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92 See Hearings on Additional Protocol II, p. 20. For example, the US Statement on signature reads as follows : "The United States also wishes to state that, although not required by Protocol II, it will act with respect to such territories of Protocol I adherents as are within the geographical area defined in paragraph 2 of Article 4 of the Treaty in the same manner as Protocol II requires it to act with respect to the territories of Contracting Parties." Documents on Disarmament, 1968, p. 205.

Finally, we come to the non-use undertaking itself. It holds as long as the Contracting Parties comply with the Treaty's restrictions.<sup>93</sup> In this respect, the statement made by the United States on signature of Additional Protocol II contained the following specific declaration :

"As regards the undertaking in Article 3 of Protocol II not to use or threaten to use nuclear weapons against the Contracting Parties, the United States would have to consider that an armed attack by a Contracting Party, in which it was assisted by a nuclear-weapon State, would be incompatible with the Contracting Party's corresponding obligations under Article 1 of the Treaty."<sup>94</sup> (Emphasis added.)

Apparently, the purpose of the US declaration is to encompass those hypothetical contingencies in which nuclear weapons are neither acquired by Contracting Parties nor introduced into their territories but in which a nuclear-weapon State assisted a Contracting Party in an armed attack by providing a "nuclear umbrella" or conventional armed support. The United States may therefore be relieved of its undertaking towards that Contracting Party.<sup>95</sup>

The statement made by the Soviet Union upon its signature of Additional Protocol II contained a declaration similar to the one made above by the United States.<sup>96</sup>

The undertaking not to use nuclear weapons against the Contracting Parties would not inhibit the United States to use nuclear weapons in retaliation in support of a Latin American country.<sup>97</sup>

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93 Hearings on Additional Protocol II, p. 6 (Charles Meyer) and p. 39 (Admiral Thomas Moorer).

94 Documents on Disarmament, 1968, p. 205. The United Kingdom made a similar declaration. For the text of the UK declaration, see Robinson, loc.cit., p. 304, note 111.

95 Ibid., p. 304.

96 SIPRI Yearbook 1979, pp. 618-619 (note 11).

97 Hearings on Additional Protocol II, p. 28 (Admiral William Lemos).

The duration of Additional Protocol II is the same as that of the Treaty which is of a permanent nature remaining in force indefinitely. This would confer to the non-use undertaking credence and continuity most needed for reaching a more extensive prohibition on the use of nuclear weapons.

A general prohibition or a non-use undertaking in the NPT would achieve more balanced obligations and responsibilities of the nuclear and non-nuclear-weapon States and would also redress the inequity existing between the Contracting Parties of the Treaty of Tlatelolco, which are Parties at the same time to the NPT, and all the other non-nuclear-weapon States Parties to the latter and not benefitting from a guarantee similar to that of Tlatelolco. Efforts to denuclearize other regions of the world would also be a step in the right direction towards a gradual progression to a complete prohibition.

Prohibition of the use of nuclear weapons has been considered in the context of the establishment of nuclear-weapon-free zones in regions such as Central Europe, Africa and South Asia. In 1975, an Ad Hoc Group of Qualified Governmental Experts for the Study of the Question of Nuclear-Weapon-Free Zones in All its Aspects, which was established in pursuance to a UN General Assembly resolution in 1974, also discussed the question of non-use.

Some experts of the Group maintained that clear and formal assurances by nuclear-weapon States not to use or threaten to use nuclear weapons against any member of a nuclear-weapon-free zone was an essential factor for the effectiveness of the zone. Other experts felt that while such an undertaking could enhance the effectiveness of the zone, this question should not be regarded as a prerequisite but considered at the time a particular zone agreement would be negotiated. The view was also expressed that one of the considerations to be taken into account was whether, in specific cases, the provision of non-use assurances could be seen as undercutting existing positive assurances.

Most experts felt that the nuclear-weapon States should

pledge themselves to respect the nuclear-weapon-free status of a zone and not to use or threaten to use nuclear weapons against any State in a zone.

In reviewing the Group's study at the 30th session of the UN General Assembly, Mexico and a number of non-aligned States secured the adoption of a resolution which, inter alia, provides for the definition of the principal obligations of the nuclear-weapon States towards a nuclear-weapon-free zone including the refrain from using or threatening to use nuclear weapons against States in the zone. China voted in favour of the resolution. France, the United Kingdom and the United States voted against, expressing difficulty about accepting such an obligation before concrete negotiations would start for the establishment of a nuclear-weapon-free zone. The Soviet Union abstained in the vote.

The positions of the nuclear-weapon States Parties to the NPT on this issue were identical to their positions at the preceding 1975 NPT Review Conference. At the Conference, Iran introduced a draft resolution whereby nuclear-weapon States would be urged to undertake a solemn obligation never to use or threaten to use nuclear weapons against countries which would become Parties or would be fully bound by the provisions of a nuclear-weapon-free zone. Both the United States and the Soviet Union refused to commit themselves in advance not to use nuclear weapons against such zones. As put by the United States, "each nuclear-free zone proposal must be judged on its own merits to determine whether the provision of specific security assurances would be likely to have a favourable effect. Moreover, we do not believe it would be realistic to expect nuclear-weapon States to make implied commitments to provide such assurances before the scope and content of any nuclear-free zone arrangement are worked out."<sup>98</sup>

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98 Doc. NPT/CONF/35/I/ Ann. II, p. 31. For the study on nuclear-weapon-free zones see UN Doc. A/AC.187/71, 19 Aug. 1977, paras. 53-56 in GAOR, 10th Special Sess. (1978), Suppl. No. 1 (A/S-10/1) and Comprehensive Study

In view of such a deadlock, the Final Declaration of the NPT Review Conference merely made reference to the urge expressed by a considerable number of delegations that nuclear-weapon States should provide, in an appropriate manner, binding security assurances to those States which become fully bound by the provisions of such regional arrangements.

## II. The Positive Guarantees

So long as the use or threat of use of nuclear weapons remains a possibility in unknown future circumstances, a guarantee of protection and assistance in kind against such use or threat of use offered by one or several nuclear-weapon States may appear as an appealing proposition to some countries, especially to those already benefitting from alliances or to those facing in their regions existing or potential nuclear Powers.

Ever since the People's Republic of China exploded its first atomic device in October 1964, positive guarantees became very much entangled with the non-proliferation issue. Since then, world security had to be seen in new perspectives, especially in the Asian theatre where further proliferation was genuinely feared. Guarantees were conceived to guard against not only the new emerging nuclear Power but also the existing and would-be nuclear Powers.

Positive guarantees raise a set of complicated questions which seem hardly possible to answer in a general way. With respect to the guarantors, one may ask which country or countries will be ready to undertake the protection separately or jointly of all non-nuclear-weapon States? Under what circumstances or conditions the latter countries may benefit from the nuclear guarantees? Should they become parties to the NPT or simply renounce the acquisition of nuclear weapons in whatever other form they choose, or should they become allies of one or more

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of the Question of Nuclear-Weapon-Free Zones in All its Aspects. Special Report of the Conference of the Committee on Disarmament (New York: United Nations, 1971), (A/10027/ Add.1), paras. 115 and 119.

of the nuclear Powers ? With regard to the types of threat, will any threat from a nuclear-weapon State suffice to set in motion the guarantees or must it be a threat with nuclear weapons ? Does a large conventional attack by a nuclear-weapon State imply a threat of nuclear escalation requiring the guarantor's immediate response ? Should the response be a nuclear one in all cases of use or threat of use of nuclear weapons ? To what extent will the guarantor carry out his guarantee ? Will it be the total destruction of the common enemy or rather the achievement of much less limited objectives ? The question of the guarantee's credibility is also essential and will be conditioned according to the circumstances in which they may be reached or invoked.

In what follows, we shall evoke some of these questions through a brief study of the main forms of positive guarantees. The forms we are contemplating here are formal alliance relationships, international multilateral agreements, a formal undertaking in the NPT and declarations.

### 1. Formal Alliance Relationships

The possibility of joining one of the multilateral alliances such as NATO or the Warsaw Pact, or entering into formal bilateral arrangements with the nuclear-weapon States were possible alternatives for non-nuclear-weapon States wishing to guarantee their security after their adherence to the NPT.

However, both the United States and the Soviet Union, in the first place, did not propose such solutions during the NPT negotiations. Both were not ready for new alliance strings of any kind. The United States' experience in Vietnam could not encourage her to enlarge its alliance affiliations. Its headaches resulting from nuclear-sharing arrangements within NATO



also did not leave much room for new accommodations.<sup>99</sup> The United States had merely repeated on different occasions its commitment to honour all its obligations under existing treaties of mutual security.<sup>100</sup> This was in response to the claim by several of its allies that their acceptance of a non-proliferation treaty should in no way exclude legitimate defence agreements with a nuclear-weapon State.<sup>101</sup>

The Soviet Union had no intention of becoming entangled in any regional defence commitments, especially after the Quemoy crisis in 1958. Soviet statements had argued that explicit super-Power security guarantees to the non-nuclear-weapon States would, in practice, be virtually the same thing as expanding the existing military alliance system of the two opposing camps and would, therefore, only heighten the intractability of East-West relations.<sup>102</sup> Its Eastern European allies' attitude was basically different from that of the Western European Allies. The former did not invoke their relationships with their major nuclear ally in any disarmament forum during the NPT negotiations. They avoided altogether the issue of positive nuclear guarantees by merely stressing that security resides in renouncing the acquisition of nuclear weapons.<sup>103</sup>

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99 The 1968 hearings held by the US Senate Committee on Foreign Relations on the NPT reflected the worries of the Senators lest the Treaty entails new alliance commitments for the United States. See, for example, Hearings on NPT, 1968, p. 48.

100 For example, see the remarks made by President Johnson on the signing of the NPT on 1 July 1968 in Documents on Disarmament, 1968, p. 459.

101 See UN Doc. A/6817, 19 Sept. 1967, Ann. IV, p. 6.

102 Roman Kolkowicz, Mathew P. Gallagher and Benjamin S. Lambeth, The Soviet Union and Arms Control : A Superpower Dilemma (Baltimore, Maryland : The Johns Hopkins Press, 1970), pp. 103-104.

103 For example, see ENDC/PV. 328, 5 Sept. 1967, paras. 17-18 (Bulgaria).

In fact, formal alliance relationships were not sought by the non-nuclear-weapon States outside the existing alliance systems except may be in the case of Israel as will be shown below.

The example of allied States is not encouraging as far as nuclear guarantees are concerned. For example, the United States' allies in NATO are not really benefitting from an explicit US formal guarantee of a nuclear response in case they are attacked or threatened by the use of nuclear weapons. The North Atlantic Treaty signed on 4 April 1949, in Washington, D.C., merely provides in its Article 5 that if an attack occurs against one or more of the Parties to the Treaty, each of the Parties will take, individually and in concert with other Parties, "such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area."<sup>104</sup> (Emphasis added.)

To reassure its European allies of a possible but not necessarily definite nuclear protection in all eventualities, the United States continues to deploy its troops and nuclear weapons in the European theatre. Moreover, schemes for nuclear sharing were devised to allow the European allies a greater voice in the nuclear strategy of the Alliance. However, those arrangements have not always met with the full approval of the European allies.<sup>105</sup> The lack of credibility in the American

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104 For the text of the Treaty, see NATO, Facts about the North Atlantic Treaty Organization (Paris : NATO Information Service, 1965), Appendix 4, pp. 210-212. In the South East Asia Treaty Organization (SEATO) and several bilateral defence treaties the language of the undertaking is even weaker - the undertaking of a signatory being merely to "act to meet the common danger in accordance with its constitutional processes". Mason Willrich, "Guarantee to Non-Nuclear Nations", Foreign Affairs, Vol. 44, No. 4, July 1966, p. 686.

105 See Chapter 4.

umbrella had even led France, it was argued, to acquire its own nuclear arsenal. Faced with the risk of total destruction, it was believed that no country would jeopardize its survival for another.<sup>106</sup>

Against such a background, it was doubtful whether a country seeking specific positive nuclear guarantees after its adherence to the NPT would have chosen the formal alliance path. We need not elaborate the case of the neutral and the non-aligned States which are basically hostile to formal alliance strings. It is quite sufficient to point out here that some neutral countries did not miss the opportunity of the discussions on nuclear guarantees to raise doubts as to their desirability or to emphasise that their status as neutral countries neither needed nor could accept guarantees other than those contained in the UN Charter.<sup>107</sup> Likewise, many non-aligned States denounced all forms of guarantees that could prejudice their status as non-aligned.<sup>108</sup> Formal bilateral guarantees were particularly discarded. As put by one non-aligned representative, a nuclear bilateral guarantee, "if encouraged would tempt other nuclear Powers to offer the same guarantee, and thus the effect ... would be, in the end, to place the world in a situation where vast areas were divided under a nuclear trusteeship of this or that Power."<sup>109</sup>

- 106 On the issue of alliances and proliferation, see Andrew Martin and Wayland Young, "Proliferation", Disarmament and Arms Control, vol. 3, No. 2, Autumn 1965, p. 128 and E. Young, A Farewell to Arms Control ?, p. 127. For those taking the view that alliances have contributed to the non-proliferation of nuclear weapons, see Beaton, Must the Bomb Spread ?, p. 117 and Kenneth Younger, "The Spectre of Nuclear Proliferation", International Affairs (London), Vol. 42, No. 1, Jan. 1966, p. 19.
- 107 See ENDC/PV. 222, 10 Aug. 1965, p. 16 (Sweden) and A/CONF. 35/SR.12, 12 Sept. 1968, p. 159 (Finland).
- 108 For example, see UN Doc. A/6817, 19 Sept. 1967, Ann. IV, pp. 6-9.
- 109 UN Doc. A/C.1/PV. 1359 (prov.), 22 Oct. 1965 in Documents on Disarmament, 1965, p. 490 (UAR). See also ENDC/PV. 262, 5 May 1966, p. 17 (Nigeria).

Before turning to other contemplated forms of guarantees, two countries deserve specific mentioning here, i.e., India and Israel. Both are involved in protracted conflicts with their neighbours, but each faces different situations.

In essence, the whole question of nuclear guarantees took new dimensions after China's ascendancy to nuclear status and its impact on the Asian scene and more particularly on India. The course that India would have followed on the question of nuclear guarantees would have influenced the positions of other Asian countries. India's position was, at no time, in favour of a formal bilateral guarantee. At some point, there was an indication that it was interested in obtaining a joint guarantee from both the United States and the Soviet Union.<sup>110</sup> In general, India's position was ambivalent and was continuously undergoing substantial change. As well put in 1967 by an observer of Indian affairs :

"The quest for a guarantee ... had come a long way ... First, it was left to the nuclear Powers to consider and offer if they wished India not to join their club; next advocated in the U.N., attenuated to fit in with the Kosygin formula; then taken out of the U.N. and feverishly explored in Moscow and Washington; and finally, after all this time, its credibility openly questioned."<sup>111</sup>

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110 Hindustan Times, 13 Apr. 1967, reported in Shelton L. Williams, The U.S., India, and the Bomb (Baltimore : Johns Hopkins University, 1969) (Studies in International Affairs No. 12), p. 50.

111 A.G. Noorani, "India's Quest for a Nuclear Guarantee", Asian Survey, vol. VII, No. 7, July 1967, p. 499. On India and nuclear guarantees, see also G.G. Mirchandani, India's Nuclear Dilemma (New Delhi : Popular Book Services, 1968), pp. 156-167; S.L. Williams, op.cit., pp. 32-35 and 50-57; Sisir Gupta, "The Indian Dilemma" in Buchan (Ed.), A World of Nuclear Powers ?, pp. 65-66; and "Nuclear Guarantees - Some Views", Foreign Affairs Reports, vol. XVII, No. 5, May 1967, pp. 45-54 and No. 6, June 1967, pp. 67-73.

As will be shown below, India was also not satisfied with Security Council resolution 255 in spite of the fact that it was generally advocating a UN solution.<sup>112</sup> Besides its support for negative guarantees, India's position developed into conceiving a credible guarantee of security in terms of nuclear disarmament when nuclear weapons had been completely eliminated.<sup>113</sup>

As far as other non-nuclear-weapon States are concerned, Israel was the only country reported to have been inclined to sign the NPT in return for a United States guarantee and that in relation to "secure 1967 borders".<sup>114</sup> It is to be noted that such a guarantee would be of a general nature and not limited to nuclear attacks or threats of nuclear attacks, which its Arab neighbours have no means to launch or resort to anyway.<sup>115</sup>

A formal American guarantee to Israel would not only antagonize its Arab neighbours already preoccupied with Israel's nuclear potential, some of whom have explicitly voiced alarming worries about their own nuclear security,<sup>116</sup> but would also

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112 For example, see DCOR, 75th mtg, 4 May 1965, para. 35.

113 For example, see A/C.1/PV. 1567 (prov.), 14 May 1968, p. 76.

114 The New York Times, 20 Nov. 1968; Davar, 21 Nov. 1968; and Haaretz, 21 Nov. 1968 referred to in Fuad Jabber, Israel and Nuclear Weapons. Present option and future Strategies (London : Chatto and Windus, 1971), p. 128, hereinafter cited as Israel and Nuclear Weapons.

115 There have been reports, in the aftermath of the October 1973 war in the Middle East, that the Soviet Union had introduced nuclear weapons into Egypt. Aviation week and Space Technology, 5 Nov. 1973 reported in Le Monde, 7 Nov. 1973. In his news conference of 21 November 1973, US Secretary of State Henry Kissinger repeated that the US had no evidence, or at least no confirmed evidence, that this had been the case. DOSB, Vol. LXIX, No. 1798, 10 Dec. 1973, p. 703.

116 See A/C.1/PV. 1573, 23 May 1968, paras. 71-76 (Jordan) and A/C.1/PV. 1628 (prov.), 3 Dec. 1968, p. 3 (Syria). Both

antagonize the States Party to the NPT who are offered a different kind of nuclear security assurances by virtue of Security Council resolution 255.

It seems to us that if a final peaceful settlement were to be achieved in the Middle East, for example, in accordance with Security Council resolution 242 of 22 November 1967,<sup>117</sup> and/or any other basic instrument whereby the five permanent members of the Security Council, which all happen to be nuclear-weapon States, would formally guarantee the strict observance of such a settlement, there would be in principle no need for specific nuclear guarantees to any of the countries concerned.<sup>118</sup>

To conclude, it would be quite pertinent to mention here that the "Agreement on Prevention of Nuclear War" signed by the United States and the Soviet Union in Washington, D.C. on 22 June 1973 was not, as pointed out by Henry Kissinger, conceived as a protection for any particular country.<sup>119</sup>

## 2. International Multilateral Agreements

Multilateral and collective guarantees by all of the major nuclear Powers were generally favoured by the non-aligned States.<sup>120</sup> What was apparently aimed at was a multilateral agreement which would not affect their status as independent and

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Jordan and Syria emphasized the importance of guarantees to their security.

117 SCOR, 22nd Yr., 1967, Resolutions and Decisions, pp. 8-9.

118 In an interview during his visit to Peking in November 1973, US Secretary of State Henry Kissinger spoke of the possibility of security guarantees in a final settlement. The form of guarantees whether unilateral or multilateral expressed in "some formal document or in some other way" should wait, he said, until the negotiations are completed. DOSB, vol. LXIX, No. 1798, 10 Dec. 1973, pp. 714-715.

119 Ibid., No. 1778, 23 July 1973, p. 143.

120 For example, see UN Doc. A/6817, 19 Sept. 1967, Ann. IV, pp. 7-9.

non-aligned States. That aim was manifested more clearly at the Conference of Non-Nuclear-Weapon States. As previously mentioned under the preceding part on negative guarantees, two groups of States failed to obtain a Conference resolution for the conclusion of a "multilateral instrument" or a "convention or protocol" on nuclear guarantees. One of the draft resolutions had explicitly recommended the conclusion of a convention or protocol which would include an undertaking on the part of nuclear-weapon States to come to the aid of any State, nuclear or non-nuclear, attacked by nuclear or conventional weapons.<sup>121</sup>

The only resolution on security guarantees was the one sponsored by the Federal Republic of Germany which, inter alia, reaffirmed the inherent right, recognized under Article 51 of the UN Charter, of individual or collective self-defence.<sup>122</sup>

### 3. Formal Undertaking Within the NPT

Nigeria was the only country to have submitted a formal proposal for the inclusion of an undertaking on positive nuclear guarantees in the NPT. In a working paper containing amendments to the identical treaty drafts of 24 August 1967, Nigeria proposed the following text for a separate article :

"Each nuclear-weapon State Party to this Treaty undertakes, if requested, to come to the aid of any non-nuclear-weapon State which is threatened or attacked with nuclear weapons."<sup>123</sup>

In a second working paper containing amendments to the identical treaty drafts of 18 January 1968,<sup>124</sup> Nigeria dropped its aforementioned proposal in order to give the two co-

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121 A/CONF.35/C.1/L.4, 17 Sept. 1968 (Uganda, United Republic of Tanzania and Zambia).

122 Final document of the Conference of Non-Nuclear-Weapon States (A/CONF.35/10, 1 Oct. 1968), Resolution A, pp. 5-6.

123 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 18 (ENDC/202. 2 Nov. 1967), Article II-A.

124 Ibid., Sec. 36 (ENDC/220, 28 Feb. 1968).

Chairmen free hand to produce a formula acceptable to all.<sup>125</sup> However, Nigeria being dissatisfied with the Security Council draft resolution submitted to the ENDC on 7 March 1968, reintroduced its proposal with changes in form and substance in connexion with the joint treaty draft of 11 March 1968.

The text of the proposal was to be inserted as a second paragraph of Article II pertaining to the undertaking of the non-nuclear-weapon States. That formula seemed to have been intentional so as to reflect the compensatory nature of the guarantee to those who have renounced altogether the acquisition of nuclear weapons. The guarantee was only to the benefit of the non-nuclear-weapon States "Party to the Treaty".<sup>126</sup>

The Nigerian representative at the ENDC argued that a "nuclear umbrella" for the signatories of the NPT was needed until such time as nuclear weapons were eliminated from all arsenals of all countries. He considered that collective security arrangements with respect to nuclear threat or attack were as essential to a non-proliferation treaty as the collective security system was to the Charter of the United Nations. Confidence in the UN Security Council as a universal guarantee against aggression was doubted as far as the use of nuclear weapons were concerned. Moreover, the Nigerian representative wondered how the deterrent value of nuclear weapons could justly be denied to those renouncing the weapons themselves.<sup>127</sup>

At the ENDC, the Nigerian proposal received a cool reception not only from the United States and the Soviet Union and their allies but also from the non-aligned members. With the exception of unfavourable comments made by Canada,<sup>128</sup> no other

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<sup>125</sup> ENDC/PV. 371, 28 Feb. 1968, para. 6.

<sup>126</sup> DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 37 (ENDC/220/Rev. 1, 14 Mar. 1968).

<sup>127</sup> ENDC/PV. 344, 2 Nov. 1967, paras. 10-13.

<sup>128</sup> ENDC/PV. 346, 9 Nov. 1967, paras. 4-5.



member made any other direct comments on the proposal. In the larger forum of the UN General Assembly, the proposal did not receive a better reception.<sup>129</sup>

The fate of the Nigerian proposal was not surprising if we take into consideration, on the one hand the reluctance of the two super-Powers to involve themselves in new commitments more far-reaching than those undertaken in the context of their alliances,<sup>130</sup> and, on the other hand, the objection of the non-aligned States to any provision which would prejudice their status as non-aligned.

In submitting its proposal, Nigeria seemed to have been inspired by the repeated declarations made by US President Johnson, already referred to. This brings us to declarations as another form of guarantees before taking up Security Council resolution 255 which is, in fact, based on declarations made by three nuclear-weapon States.

But before tackling the declarations, it must be pointed out that the aforementioned Additional Protocol III submitted by a number of non-nuclear-weapon States led by Romania at the 1975 NPT Review Conference on the non-use of nuclear weapons included as well a sort of positive guarantees. Article 3 of the Protocol, which if accepted would have been attached to the NPT as an integral part of it, stipulated that in the event of a non-nuclear-weapon State Party to the Treaty became a victim of an attack with nuclear weapons or of a threat

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129 While only one country supported the Nigerian formula, another one suggested a formula similar to that of Nigeria. See A/C.1/PV. 1568 (prov.), 15 May 1968, p. 53 (Dahomey) and A/C.1/PV. 1570 (prov.), 17 May 1968, p. 32 (Tanzania) respectively.

130 At the hearings held by the US Senate Committee on Foreign Relations, US officials had repeatedly assured the Senators that the United States was not assuming under the Treaty any additional obligations to go to the defence of a country which was subject to aggression beyond those it already had under existing treaties. Hearings on NPT, 1968, p. 40.

with the use of such weapons, the nuclear-weapon States Parties to the Protocol, at the request of the victim of such threat or attack, would undertake to provide to it immediate assistance without prejudice to their obligations under the United Nations Charter. The sponsors of the draft Protocol were not satisfied with the provisions of Security Council resolution 255 and the declarations made in conjunction with it, which would allow a nuclear-weapon State to intervene without the request of the victim of a threat or an attack with nuclear weapons.

#### 4. Declarations

The unilateral pledges made by President Johnson and repeated by other US officials had left, at the time, the impression that the United States might act individually on a worldwide scale as a guarantor of nuclear peace. However, it soon appeared that the pledges were no more than an indication that the United States, as a member of the international community, was ready to undertake with the other members whatever appropriate measures necessary to support a non-nuclear-weapon State threatened with the use of nuclear weapons. The United States hoped that its pledges would be reinforced by an action of the UN General Assembly.<sup>131</sup> The Soviet Union was also not ready to go beyond unilateral declarations promising to aid non-nuclear-weapon States party to a non-proliferation treaty victims of aggression or threatened aggression with the use of nuclear weapons.<sup>132</sup>

By September 1967, the solution of the question of nuclear guarantees was conceived by the United States in terms of a UN General Assembly action, or generally in terms of a UN resolution.<sup>133</sup>

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<sup>131</sup> For example, see Hearings on Nonproliferation, 1966, p. 12 (Dean Rusk), p. 36 (William Foster) and pp. 94-95 (Robert McNamara).

<sup>132</sup> Kolkowicz, Gallagher and Lambeth, op.cit., p. 103.

<sup>133</sup> See A/C.1/PV. 1562 (prov.), 21 Sept. 1967, p. 27.

The most revealing statement on a future UN action was the one made by the representative of Canada at the ENDC. In his statement of 12 September 1967, he suggested two alternative methods. The first was to make separate unilateral declarations using similar language by the nuclear Powers at the time the non-proliferation treaty was opened for signature whereby they would record their intention to assist non-nuclear weapon States signatories of the treaty in case they were subjected to nuclear attack or threatened with it. The second was the adoption of a UN resolution incorporating in its substantive paragraphs assurances similar to those suggested to be incorporated in the aforementioned declarations.<sup>134</sup>

The solution finally reached adopted both methods instead of only one, and the UN resolution was identified precisely as a Security Council resolution. The declarations made by the United Kingdom, the USSR and the United States at the Council constitute the bases of its resolution 255.

### III. Security Council Resolution 255

After having discussed the two types of nuclear security guarantees, it remains for us to determine the nature of the guarantees established by the resolution of the Security Council and the associated declarations. In order to do so, we shall first study their several components relating to the guarantor nuclear-weapon States, the guaranteed non-nuclear-weapon States, the States against whom and the type of action or threat against which the guarantees could be invoked, and the response or the obligations and rights incurred to face such an action or threat. In the light of this study the nature of Security Council guarantees can finally be evoked.<sup>135</sup>

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<sup>134</sup> ENDC/PV. 329, 12 Sept. 1967, paras. 23-25.

<sup>135</sup> For a succinct analysis of the Security Council resolution, see David Lenefsky, "The United Nations Security Council Resolution on Security Assurances for Nonnuclear Weapon States", New York University Journal of International Law and Politics, Vol. 3, No. 1, Spring 1970, pp. 56-71.

## 1. The Guarantor States

The guarantor States are the Soviet Union, the United Kingdom and the United States, the three nuclear-weapon States which made identical declarations in the Security Council. They also co-sponsored the draft of the Security Council resolution and voted in favour of it. France, the only other nuclear-weapon State represented in the Council at that time, abstained in the vote on the ground that the only way of overcoming the danger of nuclear weapons was to cease their manufacture and to destroy their stockpiles. It was ready to take any action in this matter to which the other powers might be willing to agree.<sup>136</sup>

Each of the three declarations is made conditional on the others. It is virtually a joint guarantee. The last paragraph of each declaration points out that voting for the Security Council resolution and the statement of the way in which the State making the declaration intends to act in accordance with the UN Charter are based upon the fact that "the draft resolution is supported by other permanent members of the Security Council which are nuclear-weapon States and are also proposing to sign the treaty on the non-proliferation of nuclear weapons, and that these States have made similar statements as to the way in which they intend to act in accordance with the Charter."<sup>137</sup> Since all those requirements were met by the three States, the declarations are effective unless at a future date, for example, one of the Guarantors withdraws from the NPT or commits an act inconsistent with its own declaration. In either case, the foundation of Security Council resolution would be compromised.

The fact that the three nuclear-weapon States and especially the two super-Powers were acting in concert was favourably

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<sup>136</sup> SCOR, 1430th mtg, 17 June 1968, paras. 50-51.

<sup>137</sup> Ibid., paras. 16 (USSR), 19 (United Kingdom) and 40 (United States).

appreciated by some countries as a significant political event.<sup>138</sup> However, other countries were either critical of the fact that only three permanent members of the Security Council were acting as guarantors, thus upsetting the balance between the five permanent members,<sup>139</sup> or sceptical about the presupposition that the three would always have a common interest in acting together.<sup>140</sup>

The view was also expressed at the 1975 NPT Review Conference that if any of the nuclear-weapon States as defined by the NPT, which are all permanent members of the Security Council, were to use or threaten to use nuclear weapons, it would be expected to veto the implementation of resolution 255 against itself.

Although the political significance of the three States acting in concert should not be underestimated, it should be borne in mind that the credibility of their common action would depend to a large extent on the state of their future relationships and the surrounding political environment. Nevertheless, the Security Council would still remain, in principle, the main guarantor of world peace and security.

## 2. The Guaranteed States

The general construction of the declarations made by the three nuclear-weapon States and the resolution adopted by the Security Council, and in particular its operative paragraph 2,

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138 For example, see A/C.1/PV. 1537, 30 Apr. 1968, para. 11 (Canada); A/C.1/PV. 1559, 2 May 1968, para. 30 (Finland); A/C.1/PV. 1570 (prov.), 17 May 1968, p. 7 (Australia); and A/C.1/PV. 1576, 29 May 1968, paras. 58-61 (Cyprus).

139 For example, see A/C.1/PV. 1567 (prov.), 14 May 1968, p. 37 (El Salvador) and SCOR, 1433rd mtg, 19 June 1968, paras. 8 (Algeria) and 27 (Brazil).

140 For example, see A/C.1/PV. 1565 (prov.), 10 May 1968 (Ceylon) and A/C.1/PV. 1570 (prov.), 17 May 1968, p. 31 (Tanzania).

is directed to States wishing to adhere to the NPT.<sup>141</sup> Although some of their provisions appear as generally applicable to all countries regardless of their individual attitude towards the NPT, the latter is the "raison d'être" of the declarations and the resolution. As bluntly put by the representative of Canada in the First Committee of the UN General Assembly, "security assurances are to be for signatories to a non-proliferation treaty, and if there were no non-proliferation treaty, there would be no assurance."<sup>142</sup> The representatives of the Soviet Union and the United States made similar statements in the Security Council.<sup>143</sup>

The discriminatory nature of the declarations and the resolution was criticised by a considerable number of non-aligned countries and especially by India which had serious reservations about the NPT and was not ready to sign it. Initially, positive security assurances were particularly thought of to ensure the security of India and other Asian countries. More generally, and as explained by William Foster, the former Director of US Arms Control and Disarmament Agency, "the resolution is intended to reassure non-aligned Nations ..."<sup>144</sup>

States aligned with one of the two super-Powers were, for obvious reasons, less concerned about the discriminatory nature

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141 Compare the first three paragraphs of each declaration and the preamble of the resolution with the sixth paragraph of the declaration and the second operative paragraph of the resolution.

142 A/C.1/PV. 1573, 23 May 1968, para. 34.

143 SCOR, 1430th mtg, 17 June 1968, paras. 11 (USSR) and 43 (United States).

144 Hearings on NPT, 1968, p. 9. At the Security Council, the representative of Pakistan pointed out that the element of deterrence to a would-be aggressor and the assurance of protection to its victim would both have been strengthened if it had been made clear that the resolution was to the benefit of any non-nuclear-weapon State regardless of whether it was aligned or non-aligned. SCOR, 1433rd mtg, 19 June 1968, para. 80.

of the declarations and the resolution. None of them raised any objection in this respect. On the contrary, aligned countries appeared to be generally indifferent or not in favour of extending security assurances to countries beyond those adhering to the NPT.<sup>145</sup>

The objections raised by some non-aligned countries against the discriminatory nature of the declarations and the resolution were mainly based on its incompatibility with the UN Charter which, as put by the representative of India in the Security Council, "does not discriminate between those who might adhere to a particular treaty and those who might not do so."<sup>146</sup> Articles 1, 2, 24 and 39 of the UN Charter were invoked by the representative of India to demonstrate that the discriminatory nature of the declarations and the resolution was contrary to the purposes and principles of the Charter.<sup>147</sup>

At the Conference of Non-Nuclear-Weapon States, three draft resolutions sponsored by a group of Latin American countries, a group of African countries, and Pakistan aimed unsuccessfully at extending security assurances whether negative or positive to all non-nuclear-weapon States, to any State, nuclear or non-

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145 See the results of the vote in Committee One of the Conference of Non-Nuclear-Weapon States on the Latin American draft resolution on security assurances referred to earlier in this chapter. It was aiming at extending those assurances to all non-nuclear-weapon States. A/CONF.35/C.1/SR.22, 26 Sept. 1968, pp. 155-156. Among those voting against were Belgium, Canada, Denmark, Greece, Netherlands and Norway from NATO; and Bulgaria, Czechoslovakia, Hungary and Poland from the Warsaw Pact.

146 SCOR, 1433rd mtg, 19 June 1968, para. 108.

147 Ibid., pp. 107-110. For positions similar to that of India, see A/CONF.35/SR.13, 12 Sept. 1968, pp. 179-180 (Zambia); A/CONF.35/C.1/SR.9, 17 Sept. 1968, p. 45 (Ghana); and A/CONF.35/SR.15, 21 Sept. 1968, p. 99 (Brazil).

nuclear, or to States renouncing the manufacture or acquisition otherwise of nuclear weapons.<sup>148</sup>

The discrimination here between States based on whether they are parties to the NPT or not is in line with the discrimination existing in both Articles IV and V on the peaceful uses of nuclear energy. However, the discriminatory nature of the declarations and the resolution of the Security Council is rather theoretical than real.

### 3. States Against Whom Security Assurances Could Be Invoked

The circumstances in which the declarations were made and the resolution was adopted left no doubt that they were mainly aimed at the People's Republic of China. However, we have to distinguish here between three categories of countries : the guarantor States, the other nuclear-weapon States not subscribing to the Security Council assurances and the potential nuclear Powers.

Some States may feel threatened by one of the guarantors. For example, it was reported that the Federal Republic of Germany for a time thought of requiring a specific pledge of nuclear non-aggression from the Soviet Union as a precondition to its adherence to the NPT.<sup>149</sup> One country representative was seriously concerned by the fact that "the only States which would in practice be able to launch a nuclear attack are, in theory and by virtue of the draft resolution, exonerated from any possible sanctions."<sup>150</sup>

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148 A/CONF.35/C.1/L.3/Rev. 2, 24 Sept. 1968 (the Latin American draft); A/CONF.35/C.1/L.4, 17 Sept. 1968 (the African draft); and A/CONF.35/C.1/L.11, 21 Sept. 1968 (the Pakistani draft). A Soviet writer was generally critical of such resolutions because they were to the benefit of non-nuclear-weapon States irrespective of their attitude to the NPT. V. Shestov, "Conference of Non-Nuclear Countries", p. 29.

149 Joseph I. Coffey, "Threat, Reassurance, and Nuclear Proliferation" in Boskey and Willrich, op.cit., p. 123.

150 SCOR, 1433rd mtg, 19 June 1968, para. 14 (Algeria).



As earlier pointed out, the foundation of the Security Council resolution would be compromised if one of the guarantor States commits an act inconsistent with its own obligations. If one of the guarantors becomes an aggressor, the whole guarantee system would fall. In such an eventuality, any Security Council action would not be based on its resolution 255 and the declarations associated with it, but would be directly based on the provisions of Chapter VII of the UN Charter.

With regard to the two other nuclear-weapon States, France and the People's Republic of China, they both have kept themselves away from the NPT. Commenting on Security Council assurances, France's representative at the UN General Assembly and at the Security Council stated that nuclear weapons were manufactured in France only for defence purposes and that it did not intend to use them either to threaten or to attack anyone.<sup>151</sup>

As far as the People's Republic of China was concerned, it was not represented yet in the United Nations when the Security Council resolution was adopted. Basically, the resolution was aimed at China. This fact was deplored by several delegations at the UN General Assembly and the Security Council. It was deplored on several grounds : the adoption of the resolution in the absence of the People's Republic of China from the United Nations which should have been admitted to the world organisation instead of planning to isolate it indefinitely; China's repeated declarations that at no time and in no circumstances it would be the first to use nuclear weapons which so far was the only nuclear-weapon State to have done so; and the spirit of General Assembly resolution 2028 (XX) from which Security Council resolution departed substantially.<sup>152</sup>

151 A/PV. 1672 (prov.), 12 June 1968, p. 7 and SCOR, 1430th mtg, 17 June 1968, para. 52.

152 For example, see A/C.1/PV. 1559, 2 May 1968, para. 54 (Nepal); A/C.1/PV. 1571 (prov.), 20 May 1968, p. 37 (Algeria); A/C.1/PV. 1572, 22 May 1968, paras. 18 and 20 (Zambia); and SCOR, 1433rd mtg, 19 June 1968, paras. 12 and 15 (Algeria). India's silence in the Security Council in this respect should be noted.

Soon after the presentation of the Security Council draft resolution to the ENDC on 7 March 1968, it was vehemently attacked in Peking Review as a step towards a US-Soviet alliance against the People's Republic of China and communism.<sup>153</sup>

But apart from the criticism addressed to Resolution 255 in this respect, it is quite significant that since its adoption, inter US/Soviet/Chinese relations have undergone such basic changes that the resolution can be said to have lost its validity, if it had one from the beginning.

If there is any justification at present for Security Council resolution 255 and the declarations associated with it, it has to be with regard to potential nuclear Powers. For example, in the discussions that took place on the NPT and the resolution of the Security Council, South Africa figured as a dangerous potential nuclear Power by some African States.<sup>154</sup> One African representative went on to express the view that "(g)iven the complacency of the big Powers regarding South Africa's defiance of United Nations decisions, we cannot but express grave doubts about the security guarantees offered under the treaty."<sup>155</sup> Israel as a potential nuclear Power also figured in the statements of some Arab representatives.<sup>156</sup>

In the aftermath of the Indian explosion of 18 May 1974, the Prime Minister of Pakistan, without making reference to Resolution 255, in a statement made the following day, said that what was needed was a joint undertaking in the nature

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153 Renmin Ribao, "A Grave Step in Forming a US-Soviet Counter-Revolutionary Nuclear-Military Alliance", Peking Review, vol. 11, No. 2, pp. 31-32. See also Albania's reaction in the First Committee of the General Assembly. A/C.1/PV. 1560 (prov.), 3 May 1968, p. 26.

154 For example, see A/C.1/PV. 1562 (prov.), 7 May 1968, pp. 21-22 (Kenya); A/C.1/PV. 1563 (prov.), 8 May 1968, pp. 13-16 (Ghana); and A/C.1/PV. 1577 (prov.), 31 May 1968, pp. 46-47 (Burundi).

155 A/C.1/PV. 1573 (prov.), 8 May 1968, pp. 14-15 (Ghana).

156 See note 116 above.

of an obligation by all the Permanent Members of the Security Council to act collectively or individually on behalf of the threatened State.

The declarations and the resolution could operate as a deterrent against States contemplating the acquisition of a nuclear-weapon capability. Such acquisition might, by itself, be considered as a threat justifying Security Council action in conformity with its resolution 255. However, the deterrent affect of the resolution might fail to dissuade a potential nuclear Power from becoming a nuclear-weapon Power, if nuclear weapons were believed to be a more effective deterrent for its own security or if they were sought for the sake of prestige or both.<sup>157</sup>

#### 4. Actions or Threats Against Which Security Assurances Could Be Invoked

The last paragraph of the preamble of the Security Council resolution and its first two operative paragraphs as well as the corresponding provisions of each of the three declarations speak of "any aggression accompanied by the use of nuclear weapons", "aggression with nuclear weapons or the threat of such aggression", and "a victim of an act or an object of a threat of aggression in which nuclear weapons are used". This means that the actions and threats against which security assurances could be invoked are only the aggression with nuclear-weapons and the threat of such aggression.<sup>158</sup> The aggression with conventional weapons and the threat of such aggression are, therefore, excluded from the application of Security Council resolution 255.

In the discussions which took place in different forums in this respect, questions pertaining to the definition of aggres-

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<sup>157</sup> See Armando Uribe, loc.cit., pp. 12-13 and David Lenefsky, loc.cit., pp. 60-61.

<sup>158</sup> Secretary of State Dean Rusk affirmed this limitation. Hearings on NPT, 1968, p. 45.

sion or threat of aggression, the identification of the aggressor and conventional weapons were raised.

On the question of defining aggression or threat of aggression, the US Secretary of State Dean Rusk explained that the aggression by nuclear weapons or the threat of such aggression would be determined by the Security Council, including all of its permanent members, "which would be the preliminary conclusion that the Security Council would have to reach".<sup>159</sup> The majority of States were sceptical about the capacity of the Security Council to define aggression, a term the United Nations had, for so many years, failed to define.<sup>160</sup> To remedy such a lacuna, one country suggested that the term be defined in the NPT,<sup>161</sup> and another proposed that it be defined by the three nuclear-weapon States making the declarations.<sup>162</sup> Others suggested the replacement of the term "aggression" by the term "use" as in the "Ethiopian Resolution".<sup>163</sup> The term "attack" was also mentioned as a possibility.<sup>164</sup> However, Professor Armando Uribe of Chile, in a paper prepared for the Conference of Non-Nuclear-Weapon States at the request of the UN Secretary-General, made the following pertinent observations :

"The concept of 'aggression' has such a long and controversial history that there are, quite justifiably, basic arguments against its use. However, the use of other terms that have not been subject-

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159 Ibid., pp. 15 and 45.

160 For example, see A/C.1/PV. 1563 (prov.), 8 May 1968, p. 12 (Ghana); A/C.1/PV. 1565 (prov.), 10 May 1968, p. 11 (Ceylon); A/C.1/PV. 1568 (prov.), 15 May 1968, pp. 48-50 (Dahomey); and A/CONF.35/SR.8, 10 Sept. 1968, p. 100 (Kuwait).

161 A/C.1/PV. 1572, 22 May 1968, para. 17 (Zambia).

162 A/C.1/PV. 1576, 29 May 1968, para. 64 (Cyprus).

163 See A/C.1/PV. 1562 (prov.), 7 May 1968, p. 32 and A/CONF.35/SR.3, 3 Sept. 1968, pp. 23-24 (Iran); and A/CONF.35/C.1/SR.2, 5 Sept. 1968, p. 10 and A/C.1/PV. 1610 (prov.), 18 Nov. 1968, p. 18 (Pakistan).

164 A/C.1/PV. 1563 (prov.), 8 May 1968, pp. 23-25 (Malaysia).

ed to such critical scrutiny evades the substance of the problem. The terms 'attack' and 'use' also lend themselves to interpretations similar to those given to 'aggression' and, even to the extent that they might be unambiguous, it is doubtful whether using them instead of 'aggression' would make the assurance more convincing for the non-nuclear-weapon countries; because they are interested in the assurance being as strong as possible and covering, so far as possible, any of the acts which, although there may not have been unanimity on the subject, have been considered 'aggression' in the widest sense of the term. From this angle, the ambiguity of the word 'aggression' presents less of a problem than would weaker expressions such as 'use' or 'attack'. Moreover, if it is recognised that the security assurances are also of importance to the nuclear Powers, they will presumably agree in practice without much discussion to make the concept of 'aggression' broad enough to cover any factor that may affect the security guaranteed."<sup>165</sup>

In a world of many nuclear Powers, the source of an attack with the use of nuclear weapons may in fact be obscure as the case is in the most common definition of "catalytic war" according to which a country may attack another country with the intention of having the attack attributed to a third country.<sup>166</sup> However, the world has not yet reached such a stage and if it does, it is highly doubtful that the NPT and the Security Council resolution adopted in conjunction with it would be able to survive.

The question of defining the threat of aggression with nuclear weapons is more problematic. As put by one representative, "(a) threat is not usually specific of the degree of armed force contemplated ... it is not normal to expect from the threatening Power that it will specify the mode of attack or the weapons it intends to use." He wondered if a threat of ag-

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165 Armando Uribe, loc. cit., p. 14. Aggression was finally defined by the UN General Assembly in 1974. GA Res. 3314 (XXIX), 14 Dec. 1974, Annex.

166 Kissinger, The Necessity for Choice, p. 243.

gression by a nuclear Power against a non-nuclear State should not be considered in effect a nuclear-weapon threat, affording to the latter the protection under the Security Council resolution.<sup>167</sup>

It appears, however, from the declarations made by US Secretary of State Dean Rusk in the hearings of the US Senate Committee on Foreign Relations that the threat has to be explicit in pointing out the possibility of using nuclear weapons.<sup>168</sup>

In any case, as explained by the representative of Canada at the Conference of Non-Nuclear-Weapon States, if a nuclear weapon were exploded on or over the territory of any State, there would be a prima facie case that an act of aggression had taken place. As for the threat, he explained that any nation feeling itself threatened could quickly bring the matter before the Security Council, which could determine whether there was a threat. In his view, the mere fact of discussion might well remove the threat.<sup>169</sup>

At the Conference of Non-Nuclear-Weapon States, a group of African countries submitted a draft resolution which aimed at the conclusion of a convention or protocol through which the States parties would have undertaken to come to the aid of any State, nuclear or non-nuclear, attacked by nuclear or conventional weapons.<sup>170</sup> As explained by one of the sponsors of that

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167 A/C.1/PV. 1627 (prov.), 2 Dec. 1968, pp. 56-57 (Cyprus). See also S.L. Williams, op.cit., p. 55.

168 Hearings on NPT, 1968, p. 16.

169 A/CONF.35/C.1/SR.10, 18 Sept. 1968, p. 52.

170 A/CONF.35/C.1/L.4, 17 Sept. 1968 (Tanzania, Uganda and Zambia). For other States showing interest in extending security assurances so as to cover conventional attacks, see A/C.1/PV. 1576, 29 May 1968, para. 62 (Cyprus) and A/CONF.35/SR.5, 5 Sept. 1968, p. 53 (Yugoslavia). In the view of the latter State, the system of security should encompass local conflicts with conventional arms, which

resolution, countries of Africa were more concerned about the use of conventional weapons stockpiled by South Africa and Portugal than the possible use of nuclear weapons.<sup>171</sup> The draft resolution was later withdrawn in favour of another Latin American draft.<sup>172</sup>

However, it must be pointed out that the failure to extend security assurances to attacks or threats of attack by conventional weapons should not be dramatised. The Security Council, and especially its permanent members, has the primary responsibility for the maintenance of international peace and security regardless of the type of attacks or threats to international security. Security Council resolution 255 and the declarations associated with it may have the virtue of laying emphasis on type of attacks or threats which were not contemplated when the UN Charter was drafted.

#### 5. The Response

The declarations and the resolution bear in mind that any aggression accompanied by the use of nuclear weapons would endanger the peace and security of all States. In order to face up to such an eventuality, the resolution envisages certain responses stated in its three operative paragraphs.

(a) The Security Council recognises that aggression with nuclear weapons or the threat of such aggression against a non-nuclear-weapon State would create a situation in which the Security Council, and above all its nuclear-weapon State permanent members, would have to act immediately in accordance

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always carried the danger of escalation into nuclear war. See also Morton A. Kaplan, "Weaknesses of the Non-proliferation Treaty", Orbis, Vol. XII, No. 4, Winter 1969, p. 1046. Kaplan is of the opinion that a nuclear guarantee must also be against conventional attack, for one virtue of a nuclear arsenal is its deterrent effect against attack by a conventional superior foe.

171 A/CONF.35/SR.6, 6 Sept. 1968, p. 74 (Uganda).

172 A/CONF.35/C.1/SR.22, 26 Sept. 1968, p. 157.

with their obligations under the United Nations Charter.

The corresponding provisions in each of the three declarations are more detailed. They describe the situation in which the Security Council would have to act as a qualitatively new situation. The immediate action would be through the Security Council. Its objective is to take the measures necessary to counter or suppress such aggression or to remove the threat of aggression in accordance with the UN Charter from which provisions of Article 1, paragraph 1, calling for "effective collective measures" are quoted.

This type of response drew scepticism on the part of some States which had little or no confidence in the possibility of an immediate action by the Council.<sup>173</sup> As put by one UN member representative, "(s)uch a provision presupposes a measure of confidence in the Security Council which, because of certain harsh realities of our time, non-nuclear Powers do not actually have. Indeed, what means have been used by the permanent members of the Security Council to bring about the application of the decisions taken by that responsible body to put an end to the intolerable situations prevailing in southern Africa and the Middle East ...?"<sup>174</sup>

(b) The Security Council also welcomes the intention expressed by certain States that they will provide or support immediate assistance, in accordance with the Charter, to any non-nuclear-weapon State Party to the NPT that is victim of an act or an object of a threat of aggression in which nuclear weapons are used.

The corresponding provision in each of the three declarations made by these "certain States", i.e., the Soviet Union,

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<sup>173</sup> For example, see A/C.1/PV. 1565 (prov.), 10 May 1968, p. 11 (Ceylon) and A/C.1/PV. 1569 (prov.), 16 May 1968, pp. 8-10 (Afghanistan).

<sup>174</sup> A/C.1/PV. 1567 (prov.), 14 May 1968, p. 52 (Mauritania).



the UK and the US, as permanent members of the Security Council, is more specific in indicating that it is Security Council action which will be sought immediately in order to provide assistance.

The second operative paragraph was criticised because of the ambiguity of the word "intention" in contrast with the legally binding obligation of the UN Charter to come to the assistance of a victim of aggression, in accordance with a decision of the Security Council.<sup>175</sup> It is also criticised because it was not clear what kind of assistance was offered; whether it was instant nuclear retaliation, diplomatic pressure, or a series of warning resolutions.<sup>176</sup> One country representative thought that the retaliatory measures should have clearly been defined for the purpose of the NPT.<sup>177</sup>

(c) Moreover, the Security Council reaffirms in particular the inherent right, recognized under Article 51 of the Charter, of individual and collective self-defence if an armed attack occurs against a member of the United Nations, until the Security Council has taken the measures necessary to maintain international peace and security.

The corresponding provision in each of the three declarations is identical to that in the Security Council resolution, except that the declarations also mention nuclear attack, thus emphasising an additional opening for the application of Article 51 not envisaged when the Charter was drafted.

Opinion was divided on the value of such a reaffirmation in relation to the use of nuclear weapons. Some States were sceptical about the adequacy of Article 51 in the nuclear age, especially as far as the right of individual self-defence was

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175 SCOR, 1433rd mtg, 19 June 1968, para. 50 (Ethiopia).

176 A/C.1/PV. 1563 (prov.), 8 May 1968, p. 12 (Ghana).

177 A/C.1/PV. 1572, 22 May 1968, para. 17 (Zambia).

concerned.<sup>178</sup> For one country, paragraph 3 of the resolution "is little more than an invitation to membership of military alliances with nuclear Powers."<sup>179</sup> In fact, aligned States were satisfied with paragraph 3 because their security relied on mutual security arrangements with a nuclear Power.<sup>180</sup> Apparently, the reaffirmation of Article 51 was introduced to reassure States which were members of alliances which included a nuclear Power.<sup>181</sup>

If the three operative paragraphs are read together and in relation to the declarations made by the three nuclear-weapon States, the general conclusion that can be reached is the following :

In recognizing that aggression with nuclear weapons or the threat of such aggression would create a qualitatively new situation, the resolution and the associated declarations have tried in the first place to establish the bases of a future Security Council action if a non-nuclear-weapon State Party to the NPT were to become a victim of such an act of aggression or an object of such a threat of aggression. In such an eventuality, an immediate Security Council action to provide assistance would be sought. The reaffirmation of the inherent right, recognized under Article 51 of the Charter, of individual and collective self-defence has apparently been introduced to reassure aligned States.

The response is only envisaged through the machinery of the Security Council. In the case of the inherent right of

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178 For example, see A/C.1/PV. 1569 (prov.), 16 May 1968, pp. 8-11 (Afghanistan); A/C.1/PV. 1576, 29 May 1968, paras. 105-106 (Indonesia); and SCOR, 1433rd mtg, 19 June 1968, paras. 78-82 (Pakistan).

179 A/C.1/PV. 1565 (prov.), 10 May 1968, p. 11 (Ceylon).

180 For example, see A/C.1/PV. 1570 (prov.), 17 May 1968, p. 7 (Australia).

181 A/CONF.35/C.1/SR.10, 18 Sept. 1968, p. 53 (Canada).

self-defence, the right is exercised, in principle, until the Security Council has taken measures necessary to maintain international peace and security.

According to the Security Council resolution, recourse to the Council has apparently become an obligation and not merely an option. As far as timing is concerned, immediate action of the Council has to be sought.<sup>182</sup>

It follows that the response is not automatic. As put by William Foster, "(n)o responsible Government could obligate itself to take military action automatically in a wide and unspecified variety of contingencies. To do so would hardly be credible. Indeed, such an attempt could lead to less, rather than more, stability in the world."<sup>183</sup>

With regard to the type of response or its degree, nothing in the declarations made by the three nuclear-weapon States or in the resolution indicates that the response to a nuclear attack or the threat of a nuclear attack will have to be in kind, i.e., the use of nuclear weapons or the threat of such use. The type of immediate assistance is left to the discretion of the Security Council. It is possible, therefore, to envisage a Security Council action with the use of conventional weapons to counter a threat of use of nuclear weapons.<sup>184</sup>

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182 For example, see A/C.1/PV. 1570 (prov.), 17 May 1968, p. 7 (Australia).

183 A/C.1/PV. 1611 (prov.), 19 Nov. 1968, p. 32. See also A/C.1/PV. 1575, 28 May 1968, para. 88 (United Kingdom). In the view of a Soviet writer, the non-automaticity of assistance "is not a defect of the solution adopted, but a realistic view of the political facts of the modern world." I. Vanin, "Security Guarantees for Non-Nuclear Countries", International Affairs (Moscow), No. 10, Oct. 1968, p. 38.

184 One writer observes that one defect of the resolution is that it does not provide for a specific strategy, planning staff or training of UN peace-keeping forces to enhance the credibility of its security assurance. He cites Article 43 of the UN Charter as the framework for a better collective security system. David Lenefsky, loc.cit., p. 68.

The declarations do not in any way deal with what would happen if the procedures of the UN Charter fail. If the right of veto is used by one of the permanent members, no effective action by the Security Council can be taken.<sup>185</sup>

But apart from the fact that the reaffirmation of the inherent right of self-defence, recognized by Article 51 of the UN Charter, is apparently designed to reassure members of alliances which include a nuclear Power, the right can also be exercised as a residual right if the Security Council were to fail to take immediate action.<sup>186</sup> In such an eventuality, measures taken will still have to be immediately reported to the Security Council.

The implications of introducing Article 51 of the UN Charter in the context of security assurances against aggression with nuclear weapons or the threat of such aggression can be quite significant. As well put by one writer, without the prospect of quick assistance, initially rendered outside the Security Council pursuant to Article 51 "the intended deterrent force of the resolution would lack any semblance of credibility and would appear to be a post mortem United Nations assurance."<sup>187</sup> Most important too, is that the declarations and the resolution can be read in the light of the broad interpretation of Article 51 which justifies the exercise of the right of self-defence in case of "acts preparatory to armed attack". One of the clearest cases of the broad interpretation of the article is that invoked by the proponents of this interpretation with respect to the possible use of nuclear weapons, an argument based on such de facto circumstances as greater rapid-

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185 See the answers by US Secretary of State Dean Rusk to Senators Pastore and Case in Hearings on NPT, 1968, pp. 17 and 45 respectively.

186 See A/C.1/PV. 1571 (prov.), 20 May 1968, pp. 16-17 (USSR).

187 David Lenevsky, loc.cit., p. 63.

ity and power with which an armed attack can be made with nuclear weapons.<sup>188</sup>

At the Conference of Non-Nuclear-Weapon States, two draft resolutions dealt with the inherent right of individual or collective self-defence. The first, which was sponsored by Pakistan, was based on the assumption that the right as recognized by Article 51 could not be exercised in the nuclear age without the immediate assistance of a nuclear-weapon State to a non-nuclear-weapon State whether a member of a military alliance or not.<sup>189</sup> The other draft, which was endorsed by the Conference, was introduced by the Federal Republic of Germany. The resolution reaffirmed, inter alia, the inherent right of individual or collective self-defence which, "apart from measures taken or authorized by the Security Council of the United Nations, is the only legitimate exception to the overriding principle of the non-use of force in relations between States".<sup>190</sup>

On the one hand, the limitations of Security Council assurances as far as the establishment of perfect security was concerned, were admitted by the representatives of the two super-Powers.<sup>191</sup> In the United States and more particularly in the US Congress Committees, US Officials reaffirmed on numerous occasions that the Security Council resolution did not involve the United States in any new commitment beyond those it already

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188 See Armando Uribe, loc.cit., pp. 10 and 15-16. For an analysis of Article 51, see Leland M. Goodrich, Edward Hambro and Ann Patricia Simons, Charter of the United Nations. Commentary and Documents (New York : Columbia University Press, Third and Revised Edition, 1969), pp. 342-353.

189 A/CONF.35/C.1/L.11, 21 Sept. 1968, operative paragraph 3 and A/C.1/PV. 1610 (prov.), 18 Nov. 1968, pp. 18-20. The draft resolution was not put to the vote.

190 A/CONF.35/C.1/L.13/REV. 1, 25 Sept. 1968.

191 For example, see A/C.1/PV. 1571 (prov.), 20 May 1968, p. 17 (USSR) and SCOR, 1430th mtg, 17 June 1968, para. 44 (United States).

had under existing treaties, and that it did not change the basic obligations which were written into the UN Charter.<sup>192</sup>

On the other hand, the advantages of the security assurances were stressed by the two super-Powers. The making of identical declarations by three permanent members of the Security Council was considered a political event of considerable importance.<sup>193</sup> The sponsorship of the resolution by the three States was also considered as an introduction of a powerful element of deterrence against nuclear aggression or the threat of such aggression.<sup>194</sup> Moreover, the resolution was defended on the basis that it gave more substance to those provisions of the UN Charter concerning the actions of the UN in the interests of maintaining and strengthening peace, especially with regard to a threat of nuclear attack.<sup>195</sup>

#### 6. The Nature of the Assurances

Now that the components of the Security Council resolution and the declarations associated with it have been analysed, it is possible to determine the nature of the assurances therein.

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192 For example, see Hearings on NPT, 1968, p. 9 (William Foster) and pp. 15-17, 34-35 and 48 (Dean Rusk). To cite one specific example, in answer to a question on whether the United States would be obligated to protect the United Arab Republic against a nuclear attack by Israel, Adrian Fisher, the Deputy Director of US ACDA, explained that the obligation would only be an obligation under the Security Council resolution which the United States did not consider it to be any independent obligation other than its obligations under the UN Charter. Hearings on Arms Control, p. 91.

193 For example, see Hearings on NPT, 1968, p. 16 (Dean Rusk). The US Senate Committee on Foreign Relations in its final report on the NPT considered that if US-Soviet co-operation in the UN developed and matured, the Security Council action would be worth the costs in diplomatic flexibility Report on NPT, 1969, p. 15.

194 A/C.1/PV. 1568 (prov.), 15 May 1968, pp. 18-20 (United States).

195 A/C.1/PV. 1571 (prov.), 20 May 1968, p. 16 (USSR).

These security assurances are of a positive nature insofar as they are aiming at providing or supporting assistance to States victim of aggression or threat of aggression. But these positive security assurances may also imply negative assurances, i.e., the non-use of nuclear weapons or the threat of such use. As pointed out by US Secretary of State Dean Rusk, "there is ... a strong implication ... that we do not contemplate committing aggression by the use of or threat of nuclear weapons." However, in his view, the NPT "does not change the existing circumstance with respect to the use of nuclear weapons."<sup>196</sup> Moreover, both the Soviet Union and the United States stressed the link between the last preambular paragraph of the NPT on the non-use of force and the Security Council resolution.<sup>197</sup>

The assurances are offered by three nuclear-weapon States in their capacity as permanent members of the UN Security Council and through the Council's machinery. The declarations made by the three States are not merely unilateral declarations of intention, as each of them is made in relation to the others, taking into consideration the fulfilment of certain conditions. They are tantamount to an unwritten agreement establishing multilateral security assurances and sanctioned by the Security Council. On this particular aspect, Professor Georges Fischer says the following :

"On pourrait même aller plus loin et affirmer qu'il s'agit d'un véritable accord entre, d'une part, les trois Etats nucléaires et d'autre part, les Nations Unies agissant par l'intermédiaire du Conseil de sécurité."<sup>198</sup>

<sup>196</sup> Hearings on NPT, 1968, p. 21. Some non-nuclear-weapon States reached the conclusion that the positive security assurances implied an obligation not to use or threaten to use nuclear weapons against non-nuclear-weapon States. See A/C.1/PV. 1568 (prov.), 15 May 1968, p. 12 (Liberia) and A/CONF.35/SR.13, 12 Sept. 1968, p. 179 (Zambia).

<sup>197</sup> A/C.1/PV. 1577 (prov.), 31 May 1968, p. 66 (USSR) and p. 82 (United States).

<sup>198</sup> Fischer, La non-prolifération des armes nucléaires, p. 150.

The assurances are to the benefit of non-nuclear-weapon States Party to the NPT. Thus, the link is established between the NPT and Security Council resolution 255. However, approval of the NPT does not necessarily mean approval of the resolution and the declarations associated with it.

The States against whom the assurances could be invoked are not necessarily the other two existing nuclear-weapon States but also future nuclear-weapon States.

The assurances are only operational in the case of use or threat of use of one type of weapons, i.e., nuclear weapons. But the use of conventional weapons may possibly imply the threat of use of nuclear weapons, and, therefore, carry with it the danger of escalation. However, it should be quite clear that the assurances are nuclear assurances.

But if the assurances are nuclear with respect to the nature of the attack or the threat of attack, they are not necessarily nuclear with respect to the response. The response is through the Security Council and the application of UN Charter provisions. In this respect the security assurances are virtually a reaffirmation of UN Charter provisions and more particularly the special responsibility of the permanent members of the Security Council. However, such reaffirmation has been done in a world situation different from that prevailing when the UN Charter was signed. In a world of five nuclear-weapon Powers and where the danger of further proliferation of nuclear weapons persists, the reaffirmation of the UN Charter is not void of meaning. However, in view of the shortcomings of the UN past experience in the field of the preservation of peace and security, the mere reaffirmation of Charter provisions appeared to many States as a meagre solution to the problems of security in the nuclear age.

Before and after the adoption of the Security Council resolution several remedies were suggested either to render the security assurances more credible or to supplement them with other measures.



Apart from the proposed resolutions and the one adopted at the Conference of Non-Nuclear-Weapon States and the review undertaken of security assurances at the 1975 NPT Review Conference, which we have repeatedly referred to in this chapter, the remedies suggested were related to the revision of the UN Charter;<sup>199</sup> the improvement of the peace-keeping machinery of the UN;<sup>200</sup> the definition of aggression;<sup>201</sup> regional security;<sup>202</sup> and unilateral guarantees outside the UN Charter.<sup>203</sup> However, the measures which received the widest attention were negative security assurances and nuclear disarmament. The latter was generally considered as the best means to assure the security of all States.

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To sum up, the analysis of nuclear security guarantees that we have undertaken clearly demonstrates the insecurity of nations in the nuclear age. Some aspects of the problem may sometimes appear as academic, but, in fact, they reflect genuine preoccupations.

The preference of the majority of non-nuclear-weapon States for negative guarantees, as opposed to positive guarantees, can clearly be felt and understood. As far as the nuclear-weapon States are concerned, preference for one or the other of the two types of guarantees cannot be established in a categorical way. The two super-Powers are, in principle, the guarantors of

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199 A/CONF.35/C.1/SR.10, 18 Sept. 1968 (Canada) and A/C.1/PV. 1624 (prov.), 28 Nov. 1968, p. 51 (India).

200 A/C.1/PV. 1576, 29 May 1968, paras. 32-33 (Sudan); A/PV. 1672 (prov.), 12 June 1968, p. 21 (Ireland); and A/CONF. 35/C.1/SR.18, 24 Sept. 1968, pp. 112-113 (Ceylon).

201 A/C.1/PV. 1627 (prov.), 2 Dec. 1968, pp. 56-57 (Cyprus).

202 A/C.1/PV. 1571 (prov.), 20 May 1968, p. 47 (Belgium).

203 SCOR, 1433rd mtg, 19 June 1968, para. 86 (Pakistan).

the security of their present allies but they are unwilling to extend their protection to other States. Although each of them may give the impression of being in contradiction with its own position on negative guarantees, as in the case of Additional Protocol II of the Treaty of Tlatelolco, they basically hold different positions on this issue. They both opted, however, for security guarantees through the machinery of the UN Security Council.

The value of the Security Council resolution and the declarations associated with it as a guarantee to the security of non-nuclear-weapon States can be assessed on its own merits as well as in the light of the past performance of the Security Council.

The resolution has built-in limitations. It was adopted by the Council without the approval of France and in the absence of the People's Republic of China and, in the prevailing circumstances, against the latter. Therefore, the balance between the five permanent members of the Council which have a special responsibility for the maintenance of peace and security and which all happen to be at present nuclear-weapon States, has been upset. Moreover, the declarations made by the three nuclear-weapon States are based on the assumption that they would always have a common interest in acting together, which judging by past experience would not necessarily always be the case.

The resolution is only to the benefit of non-nuclear-weapon States Party to the NPT, thus also upsetting the universality of application of the UN Charter provisions.

The States against whom the Security Council assurances could be invoked are the States capable of committing nuclear aggression or a threat of such aggression, i.e., the nuclear-weapon States. In view of the fact that the response to such an aggression or threat would have to be through the machinery

of the Security Council, where all these States enjoy the right of veto as permanent members of the Council, it would be quite impossible for the Council to take action against one of these States. Moreover, in the eventuality of the emergence of new nuclear-weapon States (against whom the Security Council resolution could also be invoked), it would be difficult if not impossible to expect the NPT and the resolution adopted in conjunction with it to survive in their present forms and contents.

Lastly, the response to a nuclear aggression or a nuclear threat would not be automatic and would not necessarily be in kind. The response could even take place without consulting the victim of a threat or an attack with nuclear weapons. The remedy prescribed by the Security Council could even be too late if the nuclear attack had actually occurred.

However, the Security Council resolution is not without certain marginal virtues. It tries to emphasize the relevance in the nuclear age of certain provisions of the UN Charter pertaining to the preservation of peace and security. The most significant example is the inherent right, recognized under Article 51 of the Charter, of individual and collective self-defence. This right can be exercised against a nuclear attack either until the Security Council has taken the measures necessary to maintain international peace and security, or as a residual right if the Council were to fail to take immediate action. The resolution's greatest value might turn out to be its potential deterrent effect against States contemplating a nuclear-weapon capability of their own. The acquisition of nuclear weapons by one of these States might, by itself, be considered as a nuclear threat justifying Security Council action.

The debates which took place at the United Nations and the NPT Review Conference on security assurances and, more particularly, on the Security Council resolution, reflected the almost Byzantine style and character of such debates, one aspect of international organisation that we have tried here to demonstrate. Based on the UN past experience in the field

of the preservation of peace and security, which was not always encouraging, the discussions reflected, in fact, an increasing lack of credibility in the UN collective security system and its operation, especially as far as nuclear security was concerned.

To conclude, security assurances can only be enhanced by a new approach in an atmosphere of détente and relaxation. On the one hand, the improvement of the peace-keeping machinery of the UN should continue to receive the utmost attention in order to produce some prompt and tangible results. On the other hand, just solutions should be found for protracted conflicts threatening world peace and security. Moreover, efforts should continue towards reaching a general prohibition of the use or threat of use of nuclear weapons. Such a prohibition may even obviate the need for positive assurances. The recent declarations made by the nuclear-weapon States on non-use should be made in a more formal and binding instrument, and the new drive towards the conclusion of an international convention on non-use should be encouraged. Lastly, the achievement of more arms control and disarmament measures in the field of nuclear weaponry should be pursued with vigour and perseverance.

## PART IV

*“The treaty should be a step towards the achievement of general and complete disarmament and, more particularly, nuclear disarmament”*

(Principle (c))



## CHAPTER 9

### Prospects for Arms Control and Disarmament :

#### Article VI

##### Texts :

##### Preamble

Declaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to undertake effective measures in the direction of nuclear disarmament,

Urging the co-operation of all States in the attainment of this objective,

Recalling the determination expressed by the Parties to the 1963 Treaty banning nuclear weapon tests in the atmosphere, in outer space and under water in its Preamble to seek to achieve the discontinuance of all test explosions of nuclear weapons for all time and to continue negotiations to this end,

Desiring to further the easing of international tension and the strengthening of trust between States in order to facilitate the cessation of the manufacture of nuclear weapons, the liquidation of all their existing stockpiles, and the elimination from national arsenals of nuclear weapons and the means of their delivery pursuant to a treaty on general and complete disarmament under strict and effective international control,

##### Article VI

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.

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Since the advent of the nuclear age, security through arms control and disarmament and, more particularly, nuclear disarmament has become one of the most important problems in the post-World War II era. The record within and outside the United Nations is heavily loaded with intermittent negotiations, some of which have led to tangible results. The negotiations of a non-proliferation treaty were an opportunity to intensify, and assess at the same time, the efforts deployed by the two super-Powers to halt their nuclear arms race. The result was Article VI and the corresponding preambular paragraphs of the NPT quoted above.

The examination of the Article and the preambular paragraphs in the light of principle (c) is undertaken here in close conjunction with the application of principle (b). As previously demonstrated in Chapter 2, the two principles are closely linked. The achievement of arms control and disarmament measures by the nuclear-weapon States is a goal which is looked upon by the non-nuclear-weapon States not only as a step towards the achievement of general and complete disarmament, but also as a step towards a more equitable balance of obligations of the nuclear and non-nuclear-weapon States Party to the NPT. They are two separate principles dealing with two separate issues but, as rightly noted, they act and react on each other.<sup>1</sup>

The final formulation of Article VI and the corresponding paragraphs was the outcome of a series of suggestions and formal amendments proposed by a number of countries most of which were members of the ENDC.

The American and Soviet treaty drafts of 1965, as far as arms control and disarmament were concerned, contained only preambular paragraphs.<sup>2</sup> The amendments introduced by the United

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1 ENDC/PV. 308, 14 July 1967, para. 6 (India).

2 See Appendices 3-A and B.



States in March 1966 to its own draft of 1965 left the latter unchanged in this respect.<sup>3</sup> During the 1965-1967 sessions of the ENDC the need for related measures to the non-proliferation of nuclear weapons was stressed by several delegations, a need which was eloquently reflected in the joint memorandum on non-proliferation submitted to the ENDC in 1966 by its eight non-aligned members.<sup>4</sup> The UAR was the first to suggest the inclusion in a non-proliferation treaty of a separate article which it promised to introduce.<sup>5</sup>

After the submission of the first identical treaty drafts of 24 August 1967, which included three preambular paragraphs pertaining to arms control and disarmament,<sup>6</sup> Mexico was the first country to have introduced a formal proposal for the inclusion of an article in the body of the treaty.<sup>7</sup> It was followed by India,<sup>8</sup> which suggested a separate treaty article but which did not submit any formal treaty language; Romania,<sup>9</sup> which also introduced two amendments to the preamble; and Brazil.<sup>10</sup> The "Fanfani proposal", previously dealt with in Chapter 6, concerning the transfer of fissionable material, should also be recalled.<sup>11</sup> Moreover, the Swiss aide-mémoire to the co-

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3 See Appendix 3-C.

4 DCOR, Suppl. for 1966, Doc. DC/228, Ann. 1, Sec. P(ENDC/178, 19 Aug. 1966).

5 ENDC/PV. 245, 3 Mar. 1966, p. 15 and ENDC/PV. 294, 16 Mar. 1967, para. 25.

6 See Appendix 3-D.

7 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 12 (ENDC/196, 19 Sept. 1967), Article IV-C.

8 ENDC/PV. 334, 28 Sept. 1967, para. 45.

9 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 14 (ENDC/199, 19 Oct. 1967), Preamble (paras. 1 and 6) and Article III-A.

10 Ibid., Sec. 16 (ENDC/201, 31 Oct. 1967), para. 3.

11 Ibid., Sec. 22 (ENDC/205, 30 Nov. 1967).

Chairmen of the ENDC stressed the importance of an article in the body of the treaty.<sup>12</sup>

Article VI was included for the first time in the identical treaty drafts of 18 January 1968.<sup>13</sup> The three preambular paragraphs of the August 1967 drafts were not affected by the new article. They remained as "very important statements of intention ... concerning the disarmament negotiations between the nuclear Powers."<sup>14</sup> Although the representative of the United States explained that in framing Article VI the United States had drawn "profitably and widely from many suggestions",<sup>15</sup> the new article did not meet with the satisfaction of the sponsors of those suggestions and other members of the ENDC.

Sweden proposed a new preambular paragraph on nuclear-weapon testing and two amendments to Article VI.<sup>16</sup> The United Kingdom suggested slight changes in the language of Article VI in the light of the Swedish amendments,<sup>17</sup> changes which were accepted by Sweden.<sup>18</sup> Brazil proposed its own version of Article VI which enlarged on its previous proposal for an article in the body of the treaty.<sup>19</sup> Romania also proposed the replacement of the text of Article VI by another formulation, which was in fact a reintroduction of its previous proposal for a separate article. It did not reintroduce, however, its two

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12 Ibid., Sec. 21 (ENDC/204, 24 Nov. 1967), para. 6.

13 See Appendix 3-E.

14 ENDC/PV. 357, 18 Jan. 1968, para. 67 (US representative Adrian Fisher quoting Ambassador Castañeda of Mexico).

15 Ibid., para. 63.

16 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 31 (ENDC/215, 8 Feb. 1968).

17 ENDC/PV. 369, 22 Feb. 1968, para. 27.

18 ENDC/PV. 373, 5 Mar. 1968, para. 7.

19 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 17 (ENDC/201/Rev. 2, 13 Feb. 1968).

previous amendments to the preamble.<sup>20</sup> In its memorandum to the two co-Chairmen of the ENDC, the Government of Spain also suggested the strengthening of the obligations set out in Article VI.<sup>21</sup>

The joint treaty draft of 11 March 1968 incorporated the Swedish amendments to Article VI as well as the preambular paragraph on nuclear-weapon testing but with a minor change to the latter to bring it into strict conformity with the language of the Test-Ban Treaty.<sup>22</sup>

At the 22nd resumed session of the UN General Assembly, the words "and to undertake effective measures in the direction of nuclear disarmament" were added to the first preambular paragraph quoted above, in compliance with a suggestion made by the delegation of Yugoslavia.<sup>23</sup> Another suggestion (not a formal proposal) made by the delegation of Cyprus to amend Article VI had no similar response on the part of the two co-authors of the NPT.<sup>24</sup>

The UN General Assembly resolution commending the NPT was also revised before it was put to the vote, in order to reflect more clearly the urgent need for the cessation of the nuclear arms race and the achievement of disarmament. Its fourth operative paragraph requested the ENDC and the nuclear-weapon States urgently to pursue negotiations on effective measures in this respect.<sup>25</sup>

On the day the NPT was opened for signature, 1 July 1968, the President of the United States, Lyndon B. Johnson, declared

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20 Ibid., Sec. 40 (ENDC/223/Rev. 1, 1 Mar. 1968).

21 Ibid., Sec. 35 (ENDC/219, 27 Feb. 1968).

22 ENDC/PV. 376, 11 Mar. 1968, para. 40 (US). See Appendix 3-F.

23 A/C.1/PV. 1577 (prov.), 31 May 1968, p. 81 (United States).

24 A/C.1/PV. 1576, 29 May 1968, para. 56.

25 See Appendix 3-G.

that an agreement had been reached between the Soviet Union and the United States to enter in the nearest future into discussions on the limitation and the reduction of both offensive strategic nuclear weapons delivery systems and systems of defence against ballistic missiles.<sup>26</sup> On the same day, the Soviet Union issued a memorandum concerning urgent measures to stop the arms race and achieve disarmament in which, inter alia, the Soviet Government declared itself ready to discuss with interested States the reciprocal limitation and subsequent reduction of strategic vehicles for the delivery of nuclear weapons.<sup>27</sup>

When the ENDC reconvened a few days later, on 16 July 1968, it had before it the Soviet memorandum as well as a message addressed to it by President Johnson reflecting United States' views on the issues of the nuclear arms race and disarmament.<sup>28</sup> On 15 August 1968, the ENDC adopted an agenda suggested by the co-Chairmen for its future negotiations in the field of arms control and disarmament, which merely took note of the agreement for bilateral discussions on strategic arms limitation without including the issue among the measures suggested for the ENDC to negotiate.<sup>29</sup>

At the Conference of Non-Nuclear-Weapon States, attention was focused on measures for the cessation of the nuclear arms race and nuclear disarmament. Two resolutions were adopted by the Conference in this respect, one of which concentrated solely on future bilateral discussions on strategic arms limitation.<sup>30</sup>

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26 See Documents on Disarmament, 1968, p. 460.

27 GAOR, 23rd Sess., Anns. (Vol. I), a.i. 27, 28, 29, 94 and 96, Doc. A/7134, 8 July 1968. The memorandum was later circulated as an ENDC document in ENDC/227, 16 July 1968.

28 DCOR, Suppl. for 1967 and 1968, Doc. DC/231, Ann. I, Sec. 4 (ENDC/228, 16 July 1968).

29 See ENDC/PV. 390, 15 Aug. 1968, paras. 93-121.

30 Final Document of the Conference of Non-Nuclear-Weapon States (A/CONF.35/10, 1 Oct. 1968), Resolutions C and D, pp. 8-9.

Since then and until this date of writing, efforts have not ceased to tackle different issues. Some results have been achieved whether on the universal level such as the Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof, signed on 11 February 1971,<sup>31</sup> or on the bilateral level such as the Treaty between the United States and the Soviet Union on "the Limitation of Anti-Ballistic Missile Systems" and the Interim Agreement between the same two States on "Certain Measures With Respect to the Limitation of Strategic Offensive Arms," both signed at Moscow on 26 May 1972. A Protocol was also attached to the latter agreement.<sup>32</sup> Other bilateral agreements such as the Threshold Test Ban Treaty of 1974 and the SALT II Agreement of 1979 have not yet entered into force.

In what follows we shall endeavour to analyse Article VI, its implications and implementation in the light of its negotiating history and the developments that followed its final formulation. Such an analysis can only be meaningful in conjunction with its corresponding preambular paragraphs which, in fact, originally inspired the final formulation of paragraph 3 of Article VIII of the NPT which prescribes a review conference "with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realised."<sup>33</sup> (Emphasis added.)

As this paragraph of Article VIII is of a general nature and applicable to all the provisions of the NPT, it will be dealt with in Part V of this study.

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31 GA Res. 2660(XXV), 7 Dec. 1970. GAOR, 25th Sess., Suppl. No. 28 (A/8028), pp. 11-13.

32 For the texts of the Treaty, the Interim Agreement and the Protocol, see DOSE, Vol. LXVI, No. 1722, 26 June 1972, pp. 918-921. The Strategic Arms Limitation Talks were first nicknamed SALT in the dispatches received from the US Mission to NATO. Cleveland, op.cit., p. 70.

33 See Appendix 3-G.

The analysis of Article VI is undertaken in two parts. The first part concentrates on the obligation itself as a whole. The second part assesses to what extent the obligation has been fulfilled or has a chance of being fulfilled in the three areas specified by Article VI, i.e., the cessation of the nuclear arms race, nuclear disarmament and a treaty on general and complete disarmament.

Before embarking on this analysis and in order to avoid confusion as to the meaning of the terms used, a clear distinction must be made between "arms control" and "disarmament", terms which are quite often used interchangeably in the current literature. The definitions provided by Professor Hedley Bull in his theoretical study on disarmament and arms control appear most propitious for the purposes of the analysis undertaken here. "Arms control" is defined as restraint internationally exercised upon armaments policy, whether in respect of the level of armaments, their character, deployment or use. As to "disarmament", it is defined as the reduction or abolition of armaments. It may be unilateral or multilateral; general or local; comprehensive or partial; controlled or uncontrolled.<sup>34</sup>

#### The obligation : The pursuance of Negotiations

The obligation to pursue negotiations in good faith is incumbent on each Party to the NPT. Negotiations should be pursued on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament. In the following three sections, we shall discuss the Parties to the obligation, the obligation to negotiate and the choice of the three areas of negotiations specified in the obligation.

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34 Hedley Bull, The Control of the Arms Race. Disarmament and Arms Control in the Missile Age (New York : Praeger, University Series, Second Edition, 1965), p. vii.

## 1. The Parties to the Obligation

The obligation is incumbent on each of the Parties to the Treaty. Moreover, the preamble urges the co-operation of all States to achieve at the earliest possible date the cessation of the nuclear arms race and to undertake effective measures in the direction of nuclear disarmament.

Before the submission of the first draft of Article VI, all the proposals and suggestions made for the inclusion of an article in the NPT held the nuclear-weapon States responsible either for negotiating or adopting the measures prescribed therein. This was first a reflection of the compensatory nature of the proposals, which were devised to redress the imbalance of obligations between the nuclear and the non-nuclear-weapon States party to the NPT. Secondly, the proposals enumerated measures that only the nuclear-weapon States could undertake to negotiate or adopt, i.e., measures relating to cessation of the nuclear arms race and to nuclear disarmament.

After the submission of Article VI in the identical treaty drafts of 18 January 1968, Romania continued to insist on the responsibility of the nuclear-weapon States.<sup>35</sup> Another proposal made by Brazil established a distinction between a treaty on general and complete disarmament and the cessation of the nuclear arms race and nuclear disarmament. With regard to the former, each of the parties to the NPT were to pursue negotiations in order to achieve a treaty on general and complete disarmament. In the two latter domains, the obligation to negotiate was only incumbent on each nuclear-weapon State party to the NPT.<sup>36</sup> The distinction was a logical one because in the case of a treaty on general and complete disarmament all States would be implicated at a certain stage, whereas in the case of

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35 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 40 (ENDC/223/Rev. 1, 1 Mar. 1968).

36 Ibid., Sec. 17 (ENDC/201/Rev. 2, 13 Feb. 1968).

the nuclear arms race, the nuclear-weapon States are directly responsible for putting an end to it.

However, no serious objections were raised against Article VI in this respect.<sup>37</sup> The nature of the measures envisaged in the article left no doubt that the nuclear-weapon States were directly implicated by the obligation. Both the United States and the Soviet Union admitted, in fact, their primary responsibility.<sup>38</sup> Their responsibility was looked upon by the non-nuclear-weapon States not only in the context of achieving a more secure world but as a quid pro quo for the latter's renunciation of nuclear weapons. It is true that the majority of non-nuclear-weapon States were unable in any case to produce nuclear weapons by their own means, but their renunciation of nuclear weapons was felt to be meaningless if it was not met by a definite commitment on the part of the nuclear-weapon States in the field of disarmament and arms control. It was even a question of principle more than a question of security. There was no illusion that security would have been guaranteed merely by the adoption of certain arms control and disarmament measures by the nuclear-weapon States.<sup>39</sup> The following statement by Brazil's representative at the ENDC illustrates this point :

"We are not questioning whether or not the nuclear Powers should stay nuclear until a final solution can be brought to the question of nuclear disarmament; but it seems to us imperative that the obligations imposed on the non-nuclear nations should be met on the other side by significant

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37 One country representative felt that at least a part of Article VI should have contained a specific, concrete commitment by the nuclear Powers. A/C.1/PV. 1568 (prov.), 15 May 1968, p. 46 (Dahomey).

38 ENDC/PV. 357, 18 Jan. 1968, paras. 63-66 (US) and A/C.1/PV. 1556 (prov.), 26 Apr. 1968, p. 52 (USSR).

39 Many analysts of the NPT failed to notice this question of principle, or what may be called in French "une question d'amour propre".



commitments related to the subject matter of the treaty."<sup>40</sup>

The responsibility of the non-nuclear-weapon States, however, is of no less importance. Non-nuclear-weapon States and, more particularly, the non-aligned States have played an instigating and a catalytic role in the field of arms control and disarmament. Article VI should be an occasion for these countries not only to exert more pressure on the nuclear-weapon States to achieve early and tangible results but also to participate actively in all negotiations taking place in this respect. This is why some non-aligned States were disappointed that the SALT, for example, were taking place solely between the two super-Powers without the participation of other States. A periodic substantive reporting on the progress of the "Talks" was considered by some as the least that could be done to allow the other States the possibility to assess the seriousness and objectivity with which the "Talks" were being conducted.

At the 1975 NPT Review Conference the Nuclear-Weapon States argued that all the Parties to the NPT were responsible for the achievement of arms limitations and disarmament measures. The Soviet Union went to the extent of stressing the need for a comprehensive test ban treaty which would also require ratification by the two nuclear-weapon States not parties to the NPT, i.e. China and France.

A great number of non-nuclear-weapon States argued in return that the obligation in Article VI of the NPT fell primarily on the nuclear-weapon States Parties to it.

## 2. The Obligation to Pursue Negotiations

Article VI establishes an obligation "to pursue negotiations in good faith" on effective measures in the field of disarmament. The obligation was introduced for the first time in the identical treaty drafts of 18 January 1968. It remained so until the final formulation of the NPT. In the treaty drafts

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40 ENDC/PV. 327, 31 Aug. 1967, para. 5.

prior to the January 1968 drafts, declarations of intention pertaining to the cessation of the nuclear arms race and disarmament were merely spelled out in the preambular paragraphs.

The obligation to pursue negotiations did not, however, represent the ideal solution for all States participating in the NPT negotiations. There were two basic approaches with regard to the link between the NPT and other measures of arms control and disarmament.

First, the two super-Powers preferred a simple treaty without linking it with any other arms control and disarmament measure, whether embodied in the NPT itself, coupled with it or following its conclusion. In their view, the NPT would create favourable conditions towards the achievement of general and complete disarmament and, more particularly, nuclear disarmament as prescribed by principle (c) of General Assembly resolution 2028(XX). Linking the conclusion of the NPT with other measures would, in their view, hamper the conclusion of the former without reaching agreements on the latter. It was feared that the differences which had prevented agreement on the other measures would be injected into the consideration of the NPT itself. Strikingly enough, these differences were not identified by the two super-Powers but were understood to relate mainly to the priority of measures to be negotiated and to the problem of verification, as will be shown below. Moreover, the inequality of obligations between the nuclear-weapon States and the non-nuclear-weapon States was considered to be more apparent than real, since in other agreements previously concluded, such as the Partial Test-Ban Treaty, the super-Powers had undertaken obligations without reciprocity from the non-nuclear-weapon States. In general, a step by step approach was favoured by the two super-Powers.<sup>41</sup>

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41 For example, see ENDC/PV. 325, 24 May 1967, para. 23 and ENDC/PV. 330, 14 Sept. 1967, paras. 7-8 (US); and ENDC/PV. 339, 17 Oct. 1967, para. 23 and ENDC/PV. 356, 14 Dec. 1967, para. 10 (USSR).

Under the pressure of the non-aligned States as well as from some of their own allies,<sup>42</sup> the two super-Powers merely accepted in the NPT to undertake to pursue negotiations in good faith, but not, as pointed out by one American negotiator, "to achieve any disarmament agreement, since it is obviously impossible to predict the exact nature and results of such negotiations."<sup>43</sup> (Emphasis added.)

Before turning to the second basic approach, it should be pointed out that some United States' allies conceded that it was not reasonable to ask nuclear-weapon States to make a stronger commitment when both China and France were not taking part in disarmament negotiations.<sup>44</sup> The participation of China and France is certainly primordial in order to achieve a meaningful progress towards disarmament and, more particularly, nuclear disarmament.<sup>45</sup> However, the argument resorted to by allies of the United States to defend the low posture of the undertaking in Article VI appears, in the light of past and recent developments, to be a fictitious one. The Partial Test-Ban Treaty was negotiated and signed without the participation of China and France (China was not yet a nuclear-weapon State). More important, the SALT 1 agreements of 1972 were also negotiated and signed without the participation of both countries.

The second basic approach was the one adopted in the 1965 joint memorandum on non-proliferation submitted to the ENDC by

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42 For example, see ENDC/PV. 288, 23 Feb. 1967, para. 10 (UK); ENDC/PV. 318, 1 Aug. 1967, para. 14-15 and ENDC/PV. 326, 29 Aug. 1967, para. 33 (Italy); and ENDC/PV. 342, 26 Oct. 1967, paras. 26-30 (Romania).

43 Military Implications of NPT, p. 121 (Gerard Smith).

44 For example, see A/C.1/PV. 1557, 30 Apr. 1968, para. 14 and A/C.1/PV. 1573, 23 May 1968, para. 25 (Canada); and A/C.1/PV. 1570 (prov.), 17 May 1968, p. 17 (Australia).

45 This was acknowledged by several delegations taking part in the discussions on the NPT. For example, see A/C.1/PV. 1562 (prov.), 7 May 1968, p. 18 (Kenya) and A/C.1/PV. 1565 (prov.), 10 May 1968, p. 12 (Ceylon).

its eight non-aligned members, which was previously dealt with in Chapter 2 of this study. It should be recalled here, however, that this basic approach was that "measures to prohibit the spread of nuclear weapons should ... be coupled with or followed by tangible steps to halt the nuclear arms race and to limit, reduce and eliminate the stocks of nuclear weapons and the means of their delivery." This approach constituted the origin of both principles (b) and (c) of General Assembly resolution 2028(XX). But as previously pointed out in Chapter 2, this carefully worded memorandum reflected some divergences of views among the eight non-aligned States as to the urgency and priority of measures to be agreed upon. Those divergences of views became more apparent in the 1966 joint memorandum on non-proliferation submitted to the ENDC by the same States, which also mentioned steps that "could be embodied in a treaty as part of its provisions or as declaration of intention."<sup>46</sup> Those divergent views were further accentuated or had undergone considerable change in the course of the negotiations towards the final formulation of the NPT.

Therefore, within this second basic approach, which received the support of the majority of States, a distinction must be made between three main trends.

The first trend was the one advocated by India and Sweden at the Disarmament Commission in 1965 for an "integrated" or a "package" solution linking non-proliferation with a variety of measures, including security assurances, a freeze on the production of nuclear weapons, a comprehensive test ban and a cutoff of all production of fissionable materials for military purposes.<sup>47</sup> At the ENDC in 1966, Sweden also pondered the question as to what extent agreements on the latter two measures

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46 See the discussion of principles (b) and (c) in Chapter 2.

47 DCOR, 75th mtg, 4 May 1965, para. 35 (India) and 77th mtg, 10 May 1968, para. 74 (Sweden).

might be related to the entry into force of a non-proliferation treaty.<sup>48</sup> Moreover, the "Fanfani proposal" on fissile material, previously dealt with in Chapter 6 of this study, was introduced as a proposal which "could be independent of the treaty, linked with or even incorporated in it according to circumstances".<sup>49</sup>

India emerged as one of the very few countries which strongly persisted on the linkage question, specifically on a measure in the body of a non-proliferation treaty which would have restrained the vertical proliferation of the nuclear-weapon States. As previously mentioned in Chapter 5, India advocated the prohibition of the manufacture of nuclear weapons for all States. India considered that "(a)n article in the treaty stipulating that no country should henceforth manufacture nuclear weapons should not only satisfy the criterion of balance and mutuality and of the assumption of responsibilities and obligations by both the nuclear and the non-nuclear-weapon Powers, but also solve the problem of proliferation of nuclear weapons correctly and comprehensively."<sup>50</sup>

In order to comply with principle (c) as well, India advocated that a non-proliferation treaty must embody an article of solemn obligation under which nuclear-weapon States would negotiate a meaningful programme of reduction of existing stockpiles of weapons and their delivery vehicles.<sup>51</sup> For India, principle (c) "was meant not merely as a pious preambular platitude, not just as an insubstantial incantation to be repeated

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48 ENDC/PV. 243, 24 Feb. 1966, p. 10.

49 ENDC/PV. 318, 1 Aug. 1967, para. 15. See also ENDC/PV. 236, 29 Aug. 1967, para. 33.

50 ENDC/PV. 298, 23 May 1967, para. 27. For other suggestions on the linkage question, see A/C.1/PV. 1559, 2 May 1968, paras. 44, 47 and 51 (Nepal) and A/C.1/PV. 1571 (prov.), 20 May 1968, pp. 32-35 (Algeria).

51 ENDC/PV. 298, 23 May 1967, para. 40.

occasionally as a simple magic charm, but as envisaging a concrete programme of specific action. It has to be real and meaningful principle, one which has to form the foundation, the very basis of a non-proliferation treaty."<sup>52</sup> But at a later date India suggested, without submitting any formal treaty language, the incorporation of a separate article in the treaty affirming the solemn resolve of the nuclear-weapon Powers to undertake meaningful measures of disarmament, particularly of nuclear disarmament.<sup>53</sup> The obligation was therefore not merely to negotiate a meaningful programme but to undertake certain measures.

The latter suggestion made by India was in line with a second trend which, although not advocating an arms control measure within the body of a non-proliferation treaty, such as a freeze on the manufacture of nuclear weapons advocated by India, had simply favoured an obligation by the nuclear-weapon States to undertake certain measures of disarmament.

After the submission of the identical treaty drafts of 24 August 1967, Romania proposed an article which stipulated in its first paragraph that "(t)he nuclear weapon States Parties to this Treaty undertake to adopt specific measures ..."<sup>54</sup> (Emphasis added.) After the submission of the identical treaty drafts of 18 January 1968, Romania reintroduced its proposal.<sup>55</sup> The proposal had as objectives the elimination of a political and juridical lack of balance, the illustration of equality of

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52 Ibid., para. 10.

53 ENDC/PV. 334, 28 Sept. 1967, para. 45. For a fuller understanding of the Indian views on this aspect of the NPT, see, for example, ENDC/PV. 298, 23 May 1968, paras. 9-10, 19, 27, 36 and 38; ENDC/PV. 334, 28 Sept. 1967, paras. 11, 15-16, 33 and 42-45; ENDC/PV. 336, 5 Oct. 1967, para. 68; and ENDC/PV. 370, 27 Feb. 1968, paras. 23-30.

54 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 14 (ENDC/199, 10 Oct. 1967), Article III-A.

55 Ibid., Sec. 40 (ENDC/223/Rev. 1, 1 Mar. 1968).

treatment between nuclear and non-nuclear countries and the establishment of an acceptable balance of mutual responsibilities and obligations between the two categories of countries.<sup>56</sup>

Despite the fact that the Romanian proposal was reflecting a second-best solution to the question of linking a non-proliferation treaty with other measures of arms control and disarmament, it was realised that it would not have been accepted by both the Soviet Union and the United States. Moreover, it was pointed out that it would have hardly been feasible in legal terms to enter into obligations to arrive at agreements.<sup>57</sup>

The least that could be done, therefore, was to introduce in the NPT an obligation "to pursue negotiations in good faith" as proposed by Mexico,<sup>58</sup> or "to negotiate" as proposed by Brazil.<sup>59</sup> Mexico, in fact, represented a trend which was more conciliatory on this particular aspect but without sacrificing the urgent need for further arms control and disarmament measures. In Mexico's view, to make horizontal proliferation conditional upon or subordinate to vertical proliferation was simply and purely equivalent to opposing the achievement of a non-proliferation treaty. What the UN General Assembly had asked in its resolution 2028(XX) was that the treaty should be a "step towards ... disarmament" and not an instrument that would embody an agreement on disarmament.<sup>60</sup>

The Mexican formula was the one adopted by the two co-Chairmen in their identical treaty drafts of 18 January 1968.

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56 ENDC/PV. 342, 26 Oct. 1967, paras. 26-29.

57 ENDC/PV. 363, 8 Feb. 1968, para. 11 (Sweden).

58 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 12 (ENDC/196, 19 Sept. 1967), Article IV-C.

59 Ibid., Sec. 16 (ENDC/201, 31 Oct. 1967), para. 3. We ought to point out that the article proposed by Brazil was numbered II-A, an indication of its compensatory nature to counterbalance the obligations of the non-nuclear-weapons States in Article II of the NPT.

60 ENDC/PV. 304, 13 June 1967, para. 11.

The obligation to pursue negotiations in good faith was lukewarmly admitted by a number of States, as the only solution acceptable to the two super-Powers. The obligation was admitted not without deep regrets, severe criticism or broad interpretations of its implications. It was generally felt that negotiating was not an aim in itself but a means to achieve concrete results at the earliest possible date. It was also generally felt that negotiations should start immediately without waiting for the entry into force of the NPT. Some countries took refuge in the UN General Assembly resolution 2373(XXII) commending the final draft of the NPT,<sup>61</sup> interpreting it as laying upon the nuclear-weapon States a solemn obligation to agree on further constructive measures of disarmament over and above the provisions of Article VI of the NPT.<sup>62</sup>

The dissatisfaction with Article VI since its presentation in the identical treaty drafts of 18 January 1968 was also due to its failure to specify certain measures for future negotiations, apart from the general headings "cessation of the nuclear arms race", "nuclear disarmament" and "a treaty on general and complete disarmament". This brings us to the subject matter of the prescribed negotiations.

### 3. The Subject Matter of the Negotiations

In the American treaty draft of 17 August 1965, two preambular paragraphs spoke of "effective agreements to halt the nuclear arms race, and to reduce armaments, including particularly nuclear arsenals"; and an "agreement on general and complete disarmament under effective international control". As to the Soviet treaty draft of 24 September 1965, it spoke of "agreement on the complete prohibition and elimination of all

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61 See Appendix 3-G.

62 For example, see A/CONF.35/SR.11, 11 Sept. 1968, p. 150 (Afghanistan).



types of nuclear weapons within the framework of general and complete disarmament under strict international control".<sup>63</sup>

The preamble of the identical treaty drafts of 24 August 1967 contained three paragraphs on disarmament which drew their language from the previous American and Soviet treaty drafts but with some elaboration especially with regard to general and complete disarmament. The first, second and fourth paragraphs quoted at the outset of this chapter correspond exactly to the three preambular paragraphs of the August 1967 drafts, except that the first paragraph was added to, as previously mentioned, in compliance with a suggestion made by Yugoslavia.<sup>64</sup>

All the formal proposals for a separate treaty article, which were put forward after the submission of the identical treaty drafts of August 1967, contained specific suggestions for future negotiations.

The Mexican proposal spoke of "agreements regarding the prohibition of all nuclear weapon tests, the cessation of the manufacture of nuclear weapons, the liquidation of all their existing stockpiles, the elimination from national arsenals of nuclear weapons and the means of their delivery, as well as to reach agreement on a treaty on general and complete disarmament under strict and effective international control."<sup>65</sup> The Mexican proposal closely followed the preamble of the 1967 treaty drafts, with two exceptions. First, the prohibition of all nuclear-weapon tests, which was not mentioned in the preamble, was added to the list of measures. Secondly, the conclusion of the different measures was not made entirely conditional on the achievement of a treaty on general and complete disarmament, as

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<sup>63</sup> See Appendices 3-A and B.

<sup>64</sup> See note 23 above.

<sup>65</sup> DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 12 (ENDC/196, 19 Sept. 1967), Article IV-C.

was and still is the case in the last preambular paragraph quoted at the outset of this chapter.<sup>66</sup>

The Romanian proposal for an article only mentioned "the cessation of the manufacture of nuclear weapons and the reduction and destruction of nuclear weapons and the means of their delivery."<sup>67</sup> However, Romania also proposed a new preambular paragraph as well as an amendment to the last paragraph of the preamble on disarmament quoted above. The new proposed paragraph recognized that "the danger of a nuclear war can be eliminated only by the cessation of the manufacture of nuclear weapons, the prohibition of the use of nuclear weapons, and the destruction of all existing stockpiles of such weapons and of the means of their delivery." The amendment aimed at adding the prohibition of the use of nuclear weapons to the measures listed in the preambular paragraph as well as making the conclusion of those measures independent of the achievement of a treaty on general and complete disarmament.<sup>68</sup>

The Brazilian proposal for an article mentioned "a Treaty for the cessation of nuclear arms race and for the eventual reduction and elimination of ... nuclear arsenals and the means of delivery of ... nuclear weapons."<sup>69</sup>

In all the three proposals the time factor was stressed : "with all speed and perseverance" (Mexico), "as soon as possible" (Romania) and "at the earliest possible date"(Brazil). The article proposed by Romania also contained a second paragraph which stipulated that : "If five years after the entry into force of this Treaty such measures have not been adopted,

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66 See ENDC/PV. 331, 19 Sept. 1967, para. 20.

67 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 14 (ENDC/199, 19 Oct. 1967), Article III-A.

68 Ibid., Preamble (paras. 1 and 6).

69 Ibid., Sec. 16 (ENDC/201, 31 Oct. 1967), para. 3.

the Parties shall consider the situation created and decide on the measures to be taken."<sup>70</sup>

Unlike all the above proposals, Article VI, as introduced for the first time in the identical treaty drafts of 18 January 1968, neither mentioned all the specific measures listed by those proposals nor contained a time factor. It merely mentioned "effective measures regarding cessation of the nuclear arms race and disarmament, and on a treaty on general and complete disarmament under strict and effective international control."<sup>71</sup> The Soviet representative at the ENDC explained that it was impossible not to take into account the fact that on a number of questions of nuclear disarmament there was a considerable divergence in the positions of States. Therefore, an attempt to make more specific in Article VI of the NPT obligations with regard to the solution of any particular disarmament questions, could only create obstacles in the negotiations of the NPT and make more difficult its achievement.<sup>72</sup>

The views of the two co-authors on this particular point were not shared by all the non-aligned members of the ENDC. Both Romania and Brazil reintroduced their previous proposals for an article mentioning specific measures. However, the article proposed by Brazil was new in form and content. It was composed of three paragraphs instead of one. As mentioned earlier, it made a distinction between negotiating a treaty on general and complete disarmament, the obligation of which was incumbent on all the parties (paragraph 1); and negotiating at the earliest possible date the measures listed in the previous proposal, the obligation of which was incumbent on each nuclear-weapon State party to the treaty (paragraph 2). The third paragraph

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70 Ibid., Sec. 14 (ENDC/199, 19 Oct. 1967), Article III-A.

71 See Appendix 3-E.

72 ENDC/PV. 361, 1 Feb. 1968, para. 16.

was completely new and resembled in spirit the "Fanfani proposal" on fissile materials. It read as follows :

"Each nuclear-weapon State party to this Treaty undertakes the obligation to channel, through a special United Nations fund for the benefit of the economic development of developing countries, in particular for their scientific and technological progress, a substantial part of the resources freed by the measures of nuclear disarmament."<sup>73</sup>

On the other hand, some non-aligned members shared the view of the two co-authors. Sweden, for example, was of the view that the enumeration of some specific measures might be counter-productive, as agreements on certain other scores might present opportunities for earlier implementation.<sup>74</sup> The UAR was also not in favour of overloading Article VI with too many details.<sup>75</sup>

However, in order to improve the January 1968 treaty drafts, Sweden proposed in the first place the third preambular paragraph quoted at the outset of this chapter, on the discontinuance of all test explosions of nuclear weapons.<sup>76</sup> It was included for the first time in the joint treaty draft of 11 March 1968 but with a minor change to make it conform with the language of the Test-Ban Treaty.<sup>77</sup>

Secondly, Sweden proposed two amendments to Article VI. The first introduced an element of urgency to the cessation of the nuclear arms race by suggesting the words "at an early date". The second amendment qualified disarmament as nuclear disarmament, for the sake of making clear the main goal of the nego-

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73 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 17 (ENDC/201/Rev. 2, 13 Feb. 1968).

74 ENDC/PV. 363, 8 Feb. 1968, para. 11.

75 ENDC/PV. 367, 20 Feb. 1968, para. 36.

76 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 31 (ENDC/215, 8 Feb. 1968).

77 ENDC/PV. 376, 11 Mar. 1968, para. 40 (US). The words "to achieve" in the Swedish proposal were replaced by the words "to seek to achieve".

tiations.<sup>78</sup> Moreover, in order to specify that the reference in the article was to effective measures and not merely to unspecific negotiations, the United Kingdom suggested, in the light of the Swedish amendments, slight changes in the wording of Article VI.<sup>79</sup> The suggested changes were accepted by Sweden,<sup>80</sup> and the Swedish amendments in their turn were accepted by the Soviet Union and the United States in their joint treaty draft of 11 March. None of the other proposals were taken into consideration.

At the twenty-second resumed session of the General Assembly held in April-June 1968, the discussions revealed the dissatisfaction of many States with the absence in the text of Article VI of any specific measure.<sup>81</sup> However, Cyprus was one of the few countries to have suggested, without making a formal proposal, the amendment of Article VI by making specific mention of the collateral measures to be tackled in priority. Its representative in the First Committee of the Assembly mentioned a comprehensive test-ban treaty, the cutoff of the production of fissionable materials and a freeze on the manufacture of nuclear weapons, so as to bring the arms race to a halt. Such a reference, it was claimed, would indicate that the nuclear Powers intended and were prepared to proceed with a view of concluding agreement on the treaties they had already elaborated.<sup>82</sup>

The only change which was brought to the NPT at the Assembly's session in this respect was the addition of the last part of the first preambular paragraph quoted above.

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78 ENDC/PV. 363, 8 Feb. 1968, para. 12.

79 ENDC/PV. 369, 22 Feb. 1968, para. 27. The words "relating to" were suggested to replace the word "regarding" and the word "to" was suggested to be inserted before the words "nuclear disarmament".

80 ENDC/PV. 373, 5 Mar. 1968, para. 7.

81 For example, see A/C.1/PV. 1567, 14 May 1968, p. 67 (India),

82 A/C.1/PV. 1576, 29 May 1968, paras. 54-57.

The measures covered by the obligation to pursue negotiations are therefore the following :

"... effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control." (Emphasis added.)

In the final analysis, certain significant conclusions could be drawn from the above text. Specific measures to be negotiated are not defined, but they ought to relate to three specific areas mentioned in a logical order of priorities. The preamble of the NPT could serve, however, as a guide in identifying these specific measures. Urgency is only attached to effective measures relating to the cessation of the nuclear arms race, which in principle should facilitate the achievement of nuclear disarmament and general and complete disarmament (GCD). The latter still remains the ultimate objective to be attained. However, negotiations on different measures are not conditional upon their inclusion within the framework of a GCD treaty.

In order to appease the dissatisfaction with Article VI as a whole, non-nuclear-weapon States were repeatedly reminded of the origins of Article VIII-3 on review conferences, and its organic link with Article VI and its corresponding preambular paragraphs. Without going into the analysis of Article VIII-3, which is undertaken in Part V of this study, the 1975 NPT Review Conference was a testing ground for the progress achieved by the nuclear-weapon States in the field of arms control and disarmament. The super-Powers themselves believe that the viability of the NPT depends on the results achieved in this field.<sup>83</sup> This brings us, therefore, to the second part of this chapter devoted to the achievements and prospects.

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<sup>83</sup> For example, see A/C.1/PV. 1556 (prov.), 26 Apr. 1968, p. 33 (US).

## II. Achievements and Prospects

At the first session held by the ENDC after the NPT was opened for signature on 1 July 1968, the two co-Chairmen submitted an agenda for the Conference's future discussions as a compromise between differing points of view. The agenda, which took into account the NPT, was partly tailored to the provisions of Article VI of the Treaty. It included the following items :

- "1. Further effective measures relating to the cessation of the nuclear arms race at an early date and to nuclear disarmament.

Under this heading members may wish to discuss measures dealing with the cessation of testing, the non-use of nuclear weapons, the cessation of production of fissionable materials for weapons use, the cessation of manufacture of weapons and reduction and subsequent elimination of nuclear stockpiles, nuclear-free zones, etc.

2. Non-nuclear measures.

Under this heading, members may wish to discuss chemical and bacteriological warfare, regional arms limitations, etc.

3. Other collateral measures.

Under this heading, members may wish to discuss prevention of an arms race on the sea-bed, etc.

4. General and complete disarmament under strict and effective international control."<sup>84</sup>

The non-nuclear-weapon States at their conference held in Geneva in August-September 1968 also prepared their own agenda for the future negotiations at the ENDC. The resolution adopted by the Conference in this respect listed the following measures :

- "(a) the prevention of the further development and improvement of nuclear weapons and their delivery vehicles;
- (b) the conclusion of a comprehensive test ban treaty, as an important step in the field of nuclear disarmament, and as a matter of high priority;

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84 ENDC/PV. 390, 15 Aug. 1968, para. 93.

(c) reaching agreement on the immediate cessation of the production of fissile materials for weapons purposes and the stoppage of the manufacture of nuclear weapons;

(d) the reduction and subsequent elimination of all stockpiles of nuclear weapons and their delivery systems."<sup>85</sup>

The juxtaposition of the two agendas reflected a basic difference in approach between the super-Powers and the non-nuclear-weapon States. The former's agenda contained all sorts of measures, nuclear and non-nuclear. The Agenda was not exhaustive; measures being listed as examples. One important measure missing under the first heading was strategic arms limitation, which the two super-Powers had agreed to discuss bilaterally. Finally, general and complete disarmament figured on the agenda as the ultimate goal to be achieved.

The non-nuclear-weapon States' agenda, on the contrary, contained measures relating solely to the nuclear arms race and nuclear disarmament. At the top of the list was the prevention of the further development and improvement of nuclear weapons and their delivery vehicles.

The non-nuclear-weapon States' approach converged with the spirit and letter of Article VI of the NPT. There was no point in negotiating non-nuclear measures affecting all States when the nuclear-weapon States were expected to fulfil their obligations under Article VI in the field of nuclear weaponry as a quid pro quo for the renunciation of nuclear weapons by the non-nuclear-weapon States. Moreover, in mentioning "the prevention of the further development and improvement of nuclear weapons and their delivery vehicles," the non-nuclear-weapon States wished to ascertain that other States, and not

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85 Final Document of the Conference of Non-Nuclear-Weapon States (A/CONF.35/10, 1 Oct. 1968), Resolution C, p. 8. The draft of the resolution was sponsored by a group of Latin American countries and by Ghana, India, Pakistan and Yugoslavia (A/CONF.35/C.1/L.7/Rev. 1, 24 Sept. 1968).



only the super-Powers in seclusion, were entitled to participate in the negotiations on such a measure. This was the spirit of another draft resolution sponsored by Pakistan and adopted by the Conference of Non-Nuclear-Weapon States urging the Soviet Union and the United States to enter at an early date into bilateral discussions on strategic arms limitation.

The two agendas, however, had one thing in common. With the exception of the bilateral strategic arms limitation talks, they both entrusted the ENDC with the task of negotiating all the other measures listed therein. How far the super-Powers in their bilateral talks, the ENDC, the CCD and the CD have gone in negotiating those measures is the subject matter of the following review. The review is undertaken with respect to the negotiations on measures relating to the three areas specified in Article VI of the NPT and in conjunction with the agenda proposed by the non-nuclear-weapon States which, in fact, reflected a consensus on the measures to be negotiated as well as on their order of priority. It must be pointed out, however, that the review undertaken here is a succinct one merely assessing the progress achieved and the difficulties encountered in the negotiations, without including historical background or futuristic prognoses.

Before embarking on this review, we shall dwell further on the two divergent approaches which resurged more acutely at the 1975 NPT Review Conference.<sup>86</sup>

On the one hand the United States, the Soviet Union and their respective close military allies refused to consider any proposals which imposed additional obligations on the nuclear-weapon States to pursue negotiations on arms limitations and disarmament measures. They stressed that the progress made in various arms limitations and disarmament nego-

<sup>86</sup> The following is based on the excellent summary and analysis of the discussions at the Conference in Postures for Non-Proliferation, Arms Limitation and Security Policies to Minimize Nuclear Proliferation (London: Taylor & Francis Ltd, 1979) (Stockholm International Peace Research Institute), pp. 131-138, hereinafter cited as Postures for Non-Proliferation.

tiations since the entry into force of the NPT in 1970 constituted the specific implementation of their obligations under Article VI. For example, in their lists of measures achieved, the 1971 Sea-Bed Treaty, the 1971 Biological Weapons Convention and the 1971 Agreement on the prevention of incidents on and over the high seas were put next to the measures related to nuclear non-proliferation, such as, the 1972 SALT I Agreements and the 1974 Threshold Test Ban Treaty.

On the other hand, most of the non-nuclear-weapon States at the Review Conference, rejected the proposition of the nuclear-weapon States that they were fulfilling their obligations under Article VI of the NPT. They argued, not only that the agreements and negotiations cited by the nuclear-weapon States did not constitute real progress towards effective measures of arms limitation and disarmament, as we shall later demonstrate more specifically with regard to SALT and nuclear test ban, but also that agreements relating to environments of peripheral military concern; such as, the sea-bed, and various agreements managing the deployment of military forces, did not really constitute effective measures of arms limitation as required under Article VI.

The non-nuclear-weapon States further argued, that the nuclear-weapon States were obligated not only to pursue, but ultimately to agree to some specific tangible measures of nuclear arms limitation and disarmament within a reasonable period of time. The achievement of a comprehensive test ban treaty was repeatedly identified as the most compelling obligation of the nuclear-weapon States. The gradual reduction of nuclear weapon capabilities below the ceilings of the Vladivostok Agreement of November 1974, which we shall refer to later, was also stressed. Other specific measures were also mentioned; such as, the cut-off of production of fissile materials for nuclear weapons.

With respect to the timing factor, it was widely argued by the non-nuclear-weapon States that the early date had arrived and that implementation of such measures of nuclear

arms limitation and disarmament was either urgent or already overdue.

The point was also made by the non-nuclear-weapon States that the unwillingness on the part of the nuclear-weapon States to gradually reduce their nuclear weapons made it unlikely that non-nuclear-weapon States would continue to forswear them indefinitely.

A few years later, in 1979, priority of disarmament measures relating to nuclear weapons has been clearly confirmed. The reestablished Disarmament Commission, which was entrusted by the Tenth Special Session of the UN General Assembly devoted to disarmament with the task of working out a comprehensive programme for disarmament, has put these measures at the top of the list of all the measures contemplated.

Against this background we now turn to the specific areas enumerated by Article VI of the NPT in search of achievements and prospects.

#### 1. Cessation of the Nuclear Arms Race

Arms race is defined as "(c)ompetitive and cumulative proliferation or accretion of weapons (or increase in their destructive powers) or buildup of armed forces, based upon conviction on the part of two or more adversaries that only by staying ahead in military power can they insure their national security or supremacy."<sup>87</sup> As in all other alternative definitions,<sup>88</sup> two aspects retain our attention in the context of this review of measures to halt the nuclear arms race, i.e., the quantitative increase in nuclear weapons and their delivery vehicles, and their qualitative improvement.

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87 Urs Schwarz and Laszlo Hadik, Strategic Terminology. A Trilingual Glossary (Düsseldorf and Vienna : Econ-Verlag, 1966), p. 35. For an analysis of the rationale of the arms race, see Colin S. Gray, "The Urge to Compete : Rationales for Arms Racing", World Politics, Vol. XXVI, No. 2, Jan. 1974, pp. 207-233.

88 For example, see Colin S. Gray, "The Arms Race Phenomenon", World Politics, Vol. XXIV, No. 1, Oct. 1971, pp. 40-41.

Both the quantitative and qualitative aspects of the arms race and more particularly the nuclear arms race were stressed and deplored in a triology on the arms race prepared by successive groups of experts under the auspices of the United Nations.<sup>89</sup> Suffice to mention here the following striking facts established by one of the groups of experts :

"The estimated total for world military expenditures over the period 1961 to 1970 is \$ 1,870 billion (at 1970 prices) ... an estimated 10 per cent - somewhat less than \$ 200 billion - was devoted to military research and development. This work was highly concentrated in the six countries (the United States, the Soviet Union, the People's Republic of China, France, the United Kingdom and the Federal Republic of Germany) which now account for more than four fifths of total military expenditure. Although only a minor part of the total, it is this outlay for research and development which determines the main feature of the modern arms race - the qualitative changes in armaments ...

National inventories of stocks of armaments are never published, but some figures are available which reflect these various qualitative changes. At the outset of the decade, hardly any intercontinental ballistic missiles (ICBMs) had yet been deployed. By the end of the decade the estimated numbers were 2,150. In 1960 the deployment of submarine-launched ballistic missiles was negligible. By the end of the decade, some 55 nuclear-missile submarines were operational, comprising about 800 missiles, capable of delivering about 1,800 warheads ..."<sup>90</sup>

The cessation of the nuclear arms race can be achieved quantitatively by a total freeze on the production of nuclear weapons and their delivery vehicles and qualitatively by stopping research and development of new weapons systems. The quan-

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89 Effects of the Possible Use of Nuclear Weapons, op. cit., Economic and Social Consequences of the Arms Race and of Military Expenditures (New York: UN Pub. No. E. 72.IX.16, 1972) and Disarmament and Development (New York: UN Pub. No. E. 73.IX.1, 1972). The second publication was updated in 1977 (A/32/88/Rev. 1).

90 Economic and Social Consequences of the Arms Race and of Military Expenditures, paras. 9, 10 and 17.

titative and qualitative aspects are the subject matter of the SALT as far as strategic arms - as defined by the two super-Powers - are concerned. With respect to nuclear-weapons systems in general, a comprehensive test-ban treaty would be an effective barrier to the qualitative nuclear arms race. Moreover, an agreement on the cessation of the production of fissile materials for weapons purposes would bring to a halt the further production of nuclear weapons.

(a) Strategic Arms Limitation

(i) SALT I Agreements, 1972

The announcement on 1 July 1968, at the signing of the NPT in Washington, D.C., that the two super-Powers had reached agreement to enter into discussions on strategic arms limitation and reduction,<sup>91</sup> was obviously intended to demonstrate to the non-nuclear-weapon States that the two countries took seriously their obligations under Article VI of the NPT.<sup>92</sup> However, talks were delayed because of the Soviet intervention in Czechoslovakia in August 1968. Moreover, there was a change in the Administration in the United States at the beginning of 1969 and the new Administration was not yet prepared to enter into that kind of talks at that particular time. There was also the need felt by the new Administration to make contacts with its NATO allies prior to any bilateral talks with the Soviet Union.<sup>93</sup>

The talks, which were later nicknamed SALT I, only started on 17 November 1969 at Helsinki. The first session lasted until 22 December 1969. The following sessions were held alternatively in Vienna and Helsinki until 24 May 1972.

On 26 May 1972 in Moscow, President Richard Nixon and Party

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91 See note 26 above.

92 Willrich, Non-Proliferation Treaty, p. 162.

93 Hearings on NPT, 1969, pp. 389 and 395-396 (US Secretary of Defence Melvin Laird).

Secretary Leonid Brezhnev signed on behalf of their countries three legal instruments pertaining to strategic arms limitation. These are a Treaty on the Limitation of Anti-Ballistic Missile Systems (ABM), an Interim Agreement on Certain Measures with Respect to the Limitation of Strategic Offensive Arms and a Protocol to the Interim Agreement defining the effect of the latter upon submarine-launched ballistic missiles (SLBM).<sup>94</sup> (These instruments entered into force on 3 October 1972). Moreover, agreed interpretations of the Treaty and the Interim Agreement were initialled by the Heads of the Delegations on the same day. Unilateral statements of interpretation were also made for matters where no agreement had been reached.<sup>95</sup>

In the preambular parts of both the ABM Treaty and the Interim Agreement, the United States and the Soviet Union were "(m)indful of their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons". In the preambular part of the ABM Treaty they also declared their intention "to achieve at the earliest possible date the cessation of the nuclear arms race and to take effective measures toward reductions in strategic arms, nuclear disarmament, and general and complete disarmament".

In one of his numerous explanations of the Moscow agreements, Gerard Smith, the chief American negotiator of the agreements, thought that they represented "very solid earnest of the seriousness of the American and Soviet intentions to fulfill their obligations under Article VI of the (NPT)."<sup>96</sup> It is this very aspect of the agreements that we analyse here, in

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94 For the texts of these legal instruments, see DOSB, Vol. LXVI, No. 1722, 26 June 1972, reproduced in Appendix 11 of this study.

95 See DOSB, Vol. LXVII, No. 1723, 3 July 1972, pp. 11-14.

96 US Congress, Senate, Committee on Foreign Relations, Hearings : Strategic Arms Limitation Agreements, 92nd Congress, 2nd Session on Executive L (Washington, D.C. : US Government Printing Office, 1972), p. 38.

order to find out how far they really constitute a cessation of the nuclear arms race quantitatively and qualitatively. Before doing so, the following statement made by the representative of Zambia just a few days after the talks were inaugurated at Helsinki reflects, in fact, the attitude that many countries critical of the NPT would follow if a real progress were to be achieved :

"If some concrete measures can be agreed upon at these talks towards reducing the nuclear might of nuclear nations, my Government may then be able to reconsider its position with regard to the non-proliferation Treaty as a whole."<sup>97</sup>

In a nutshell, the agreements, which were supplemented on 3 July 1974 by a Protocol to the ABM Treaty also signed at Moscow (entered into force on 26 May 1976), can be summarized and read as follows:<sup>98</sup>

#### The ABM Treaty and Its Protocol

- Neither Party is permitted to deploy a nationwide ABM defence or a base for such a defence.

- Each Party was permitted under the ABM Treaty to deploy a limited defence of two areas, one centred upon its national capital and the other containing some part of its intercontinental ballistic missiles (ICBMs). In each defence area

97 A/C.1/PV. 1702 (prov.), 27 Nov. 1969, p. 41.

98 The following outline is also based on the explanations given by the US Secretary of State William Rogers in his report to the US President, on the information furnished by the US Defence Department in the Hearings held by the US Senate Committee on Armed Services and on analyses made by the International Institute for Strategic Studies in London. Unless otherwise specified, see respectively DOSB, Vol. LXVII, No. 1723, 3 July 1972, pp. 3-11; US Congress, Senate, Committee on Armed Services, Hearings : Military Implications of the Treaty on the Limitations of Anti-Ballistic Missile Systems and the Interim Agreement on Limitation of Strategic Offensive Arms, 92nd Congress, 2nd Session (Washington, D.C. : US Government Printing Office, 1972); The Military Balance. 1972-1973 (London : IISS, 1972), Appendix I, pp. 83-86; and The Military Balance. 1973-1974 (London : IISS, 1973), pp. 1-2.

each Party was permitted up to 100 ABM launchers and missiles. Each launcher must be static and land-based (sea-based, air-based and mobile land-based ABM systems are prohibited), and must be able to fire only one ABM missile and warhead. Each area may have a 150 km. radius, with centre point at least 1300 km. from that of the other area. Within the national capital-defence area (NCA), there are restrictions on ABM radar deployment (6 complexes each being circular and having a diameter of no more than 3 km.) but not on radar size or numbers; within the ICBM-defence area, radar size and numbers are constrained (2 large phased-array ABM radars and 18 ABM radars having a lesser potential) but not radar deployment.

The restrictions on radars, together with a general treaty prohibition on moving towards nation-wide defences, were intended to ensure that, despite any increase in missile capability, the effective coverage of ABM systems would remain limited to relatively small sections of territory.

In practice, the above mentioned provisions meant that the Soviet Union would be able to expand its Moscow area system, which in 1972 was estimated to contain 64 launchers with Galosh missiles, to not more than 100 launchers, as well as being allowed to construct another site to defend some of its ICBMs. The United States on its part would have been able to complete the construction of only one of its ICBM-defence Safeguard sites, i.e., the one which was being deployed in the vicinity of Grand Forks Air Force Base in North Dakota. The site was expected to be operational in late 1974. Another site which was being constructed in the vicinity of Malmstrom Air Force Base in Montana had to be abandoned. Twelve sites were originally contemplated in the Safeguard programme in preparation for deploying long-range Spartan and short-range Sprint missiles. The United States also had the option of constructing a second 100-missile site to protect Washington, D.C.

Under the Protocol of 1974, the United States and the Soviet Union decided to maintain only the one ABM site that



each had, which is Moscow for the Soviet Union and an ICBM field for the United States. For the sake of flexibility each Party, however, has the option once to reverse its original decision as to the site in any five-year period when the Treaty comes up for automatic review. This means, for example, that the Soviet Union has the option of moving its ABMs once from Moscow to an ICBM site.

- The above limitations do not apply to ABM systems or their components used for development or testing, and located within current or additionally agreed test ranges. Each Party may have no more than a total of fifteen ABM launchers at test ranges. In fact, modernization and replacement of ABM systems or their components may be carried out within the limits imposed by the Treaty. One additional Treaty provision of importance in this respect is that neither Party is permitted to give ABM capability to non-ABM systems, e.g., the modification of air-defence missiles (SAMs) to give them a capability against strategic ballistic missiles.

- Each Party undertakes not to transfer to other States, and not to deploy outside its national territory, ABM systems or their components limited by this Treaty.

In practice, it means that the United States would be prohibited, for example, from deploying ABM systems on the territories of its European allies.

- Verification is by national technical means. The Parties have agreed not to interfere with these means.

- In order to promote the objectives and implementation of the provisions of the Treaty, the Parties established a Standing Consultative Commission.

- The Treaty is of unlimited duration. Withdrawal is permitted for supreme interests.

#### The Interim Agreement and Its Protocol

- Each Party is permitted to keep any fixed land-based ICBM launchers which were operational and under construction on 1

July 1972. Since that date, no new fixed land-based ICBM launchers may be built. The construction freeze does not cover mobile land-based ICBM launchers. However, the United States had made clear to the Soviet Union that it would consider the deployment of operational land-mobile ICBM launchers during the period of the Interim Agreement to be inconsistent with the objectives of the Agreement.

The Agreement mentions no numbers. However, the United States indicated that on 26 May 1972, it had 1054 operational, land-based ICBM launchers and none under construction. On that date, according to United States' official sources, the Soviet Union had approximately 1618 land-based ICBM launchers operational and under active construction. This meant that the Soviet Union could complete the construction and deployment of 313 modern heavy ICBM launchers - the SS-9 class missiles.

- Neither Party may convert to modern heavy ICBM launchers or any other ICBM launchers.

All operational ICBMs other than the Soviet SS-9 were either "light" (the US Minuteman and the Soviet SS-11 and SS-13) or "older" ICBM launchers of types first deployed prior to 1964 (the US Titan and the Soviet SS-7 and SS-8). Thus all these ICBM launchers are prohibited from being converted to an SS-9 or any new modern heavy launchers. The United States had made clear that it would consider any ICBM having a volume significantly greater than that of the largest light ICBM operational on either side (which is the Soviet SS-11) to be a heavy ICBM.

- Each Party is permitted to keep submarine-launched ballistic missile (SLBM) launchers operational or under construction on 26 May 1972. In addition the Interim Agreement and the Protocol attached to it permit launchers and submarines beyond 740 SLBM launchers on nuclear-powered submarines for the Soviet Union and 656 SLBM launchers on nuclear-powered submarines for the United States, subject to two constraints :

First, additional SLBM launchers may become operational

only as replacements for an equal number of ICBM launchers of types first deployed prior to 1964 (US Titan and Soviet SS-7 and SS-8), or for launchers on older nuclear-powered submarines or for modern SLBM launchers on any type of submarine. All other light ICBMs are not replaceable with SLBMs (i.e., Minuteman, SS-11 and SS-13).

Second, such substitution should not result in the Soviet Union having operational more than 62 modern ballistic missile submarines or more than 950 SLBM launchers on nuclear-powered submarines and all modern SLBM launchers on any type of submarine (the Soviet Union was estimated to have 22 diesel-powered submarines equipped with nuclear missiles). With respect to the United States, it should not have operational more than 44 modern ballistic missile submarines or more than 710 SLBM launchers.

At the time of signing the Interim Agreement and the Protocol, the United States had 656 SLBM launchers and 41 submarines, while the Soviet Union was estimated to have 560 SLBM launchers in service and some 56 nuclear-powered submarines (including about 46 of the modern Y-class) which were operational or under construction.

- The Parties agree that the number of test and training launchers for ICBMs and SLBMs, including "modern heavy" ICBMs, shall not be increased significantly above the current number of test and training launchers for such missiles. In fact, modernisation and replacement of strategic ballistic missiles and launchers covered by the Interim Agreement may be undertaken.

In practice this meant that the United States was free to continue the replacement of ICBM Minuteman 1/2 and SLBM Polaris with the ICBM Minuteman 3 and SLBM Poseidon multiple independently targetable re-entry vehicle (MIRV) systems, as well as to continue development of the Trident SLBM system (formerly known as ULMS: Undersea Long-Range Missile System), while the Soviet Union had the freedom to continue development of sys-

tems such as the improved versions of ICBM SS-9, SS-11 and SS-13 called SS-18, SS-17 and SS-16 respectively, the first two of which had been tested with re-entry systems of three multiple re-entry vehicles (MRV) and were reportedly being prepared to carry full MIRV systems at a later stage. The Soviet Union had also the freedom to continue the development of its 3000-mile range SS-N-8 SLBM.

- As in the ABM Treaty, verification is by national technical means. The Parties have also agreed not to interfere with these means.

- In order to promote the objectives of implementation of the Interim Agreement, the Parties could use the Standing Consultative Commission established pursuant to the ABM Treaty.

- The duration of the Interim Agreement was five years.

In a unilateral statement made by the United States, it was pointed out that if an agreement providing for more complete strategic offensive arms limitations were not achieved within five years, US supreme interests could be jeopardised. Should that occur, it would constitute a basis for withdrawal from the ABM Treaty.

However, before the expiration of the Interim Agreement on 5 October 1977, mutual statements were made a few days before, by the United States and the Soviet Union, to the effect that no action inconsistent with the Agreement would be taken while SALT II negotiations were being completed.

To sum up, the following chart may render the comparisons under the provisions of the SALT I agreements clearer:

	USSR	US
<u>The ABM Treaty and Its Protocol</u>		
ABM defended areas	1	1
ICBM defence launchers		100
ICBM defence radars		20
National capital area (NCA) defence ABM launchers	100	
NCA radar complexes	6	
Research and Development of ABM launchers	15	15

	USSR	US
<u>The Interim Agreement and Its Protocol</u>		
Heavy ICBMs	313	0
Light ICBMs	1305(1)	1054(1)
SLBMs	950(2)	710(3)
Modern ballistic missile submarines (nuclear-powered)	62	42
Diesel submarines, equipped with nuclear missiles	20	0
Test and training launchers for ICBMs and SLBMs	no significant in- crease permitted	

- (1) The figure would be modified if the ICBMs deployed prior to 1964 were replaced with SLBMs.
- (2) In order to reach this target in excess of 740 missiles, the USSR would have to replace old SLBMs and/or old ICBMs deployed prior to 1964, i.e., SS-7 and SS-8 ICBMs.
- (3) In order to reach this target in excess of 656 missiles, the US would have to replace the old ICBMs deployed prior to 1964, i.e., Titan ICBMs.

With respect to the comparisons under the provisions of the Interim Agreement and Protocol, a net advantage in favour of the Soviet Union is quite obvious. In the American debate, it was explained that this net advantage is offset by American preponderance in heavy bombers (457 to 140), nuclear warheads (5598 to 2220), the MIRVs, which the Soviets until 1972 had not yet developed, and the greater accuracy and penetration capabilities of the US offensive systems. It was also estimated that in the absence of any agreement, the Soviets would have had in 1977 a total of 2250 ICBMs instead of 1618, 1050 SLBMs instead of 950 and 80-90 nuclear-powered submarines instead of 62; whereas the United States would have remained static in ICBMs, SLBMs and submarines.

However, the US Congress resolution authorising the President to approve the Interim Agreement urged and requested him to seek a future treaty that, inter alia, would not limit the US to levels of intercontinental strategic forces inferior to the limits provided for the Soviet Union. This clause was in-

roduced by Senator Henry M. Jackson and came to be known as the "Jackson amendment".<sup>99</sup>

Without getting involved in an extensive assessment of the agreements' effect on the strategic balance between the two super-Powers,<sup>100</sup> we turn now to their evaluation as measures aimed at the "cessation of the nuclear arms race" prescribed by Article VI of the NPT.

In terms of their quantitative aspects, the agreements set numerical targets to be attained for certain weapons systems. The targets are final in the case of the ABM systems and temporary in the case of the strategic offensive systems covered by the Interim Agreement. In this particular direction, the agreements can be viewed from two opposite angles, i.e., as plans for the future cessation of the nuclear arms race, once the targets have been attained, or as plans for the continuation of the nuclear arms race to an unknown point. We tend to view the agreements from the latter angle, for two basic reasons. First, although these targets have been carefully set in conjunction with other weapons systems not covered by the agreements, in order to establish a strategic parity between the two super-Powers, this parity could have been achieved instead by imposing an immediate freeze on the production of all the weapons systems covered by the agreements with certain adjustments in the other weapons systems by means of reductions and/or cancellations of certain programmes. Secondly, it was not certain that an agreement providing for more complete strategic offensive arms limitation could be achieved before the end of the five-years duration of the Interim Agreement, a fact that has

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99 SIPRI Yearbook 1973, p. 419.

100 For example, see Ibid., Chapters 1 and 2, pp. 1-59; William R. Kintner and Robert L. Pfaltzgraff, Jr., "Assessing the Moscow SALT Agreements", Orbis, Vol. XVI, No. 2, Summer 1972, pp. 341-360; and Georges Fischer, "Les accords sur la limitation des armes stratégiques", Annuaire Français de Droit International, Vol. XVIII, 1972, pp. 2-84.

contributed to the vertical proliferation of nuclear weapons by the two super-Powers.

In terms of their qualitative aspects, the agreements deal with the most sophisticated strategic nuclear-weapons systems. However, the agreements transform the arms race into a qualitatively new nuclear arms race. In the first place, the ABM Treaty gives impetus to a weapons system which originally provoked the development of qualitatively new counter systems such as MRV and MIRV.<sup>101</sup> The latter have been left unrestrained by the Interim Agreement, which would allow the Americans to improve on their MIRV system and the Soviets to devise a similar system of their own. The Treaty also allows for the modernisation and replacement of ABM systems and their components. In addition, it does not prevent the development of completely new defence systems such as a laser system which could be used not only as a new ABM system but also in the form of death rays for submarine destruction.<sup>102</sup> In fact, SALT I has not dealt with anti-submarine warfare (ASW) systems nor with anti-aircraft (AA) defences, except that the ABM Treaty prohibits giving an ABM capability to such defences.

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101 See The Origins of MIRV (Stockholm : SIPRI Research Report, No. 9, Aug. 1973). It is significant that the US Senate Committee on Foreign Relations, in its executive report on the NPT in 1969, was of the view that decisions facing both the United States and the Soviet Union in the area of strategic offensive and defensive missiles were of vital importance not only to the peace and security of the world but to the successful implementation of the NPT. In order to give effect to Article VI of the latter, the Committee believed that the Administration should consider deferring the deployment of these weapons until it had had time to make an earnest effort to pursue meaningful discussions with the Soviet Union. Report on NPT, 1969, p. 18. See, for example, the interventions made by Senators Fulbright, Gore and Javits in the Committee in Hearings on NPT, 1969, pp. 347-352, 378, 389 and 420-421.

102 Johan Galtung, "The SALT Armament Agreement", Bulletin of Peace Proposals, No. 4, 1972, p. 292.

As far as the Interim Agreement is concerned, it appears in the first instance as a means of getting rid of obsolete weapons systems, such as the American Titan and the Soviet SS-7 and SS-8, without foreclosing the right to replace them with the most sophisticated systems such as the ICBM Minuteman 3 and SLBM Poseidon MIRV systems. The Interim Agreement also allows for continuous modernisation and replacement of ICBMs, SLBMs and nuclear-powered submarines, such as the Trident submarine system which could, on original plans, carry 24 missiles with a range of 6000 miles when deployed in the early 1980s.<sup>103</sup> Moreover, the Interim Agreement does not deal with heavy strategic bombers such as the B-52. It would not have prevented the construction of the B-1 Bomber, a supersonic, swing-wing intercontinental bomber, which was cancelled, after all, by President Carter on 30 June 1977.<sup>104</sup>

Apart from the strategic offensive weapon systems as mutually defined and agreed upon by the two super-Powers in their 1972 agreements, another nuclear arms race is taking place on lower levels. One example is the so-called mini-nukes, a new generation of tactical nuclear weapons with yields in the sub-kiloton range, overlapping the yields of the most powerful conventional charges, with extreme delivery precision, and with extra-accurate intelligence support. As was well put by Mrs. Alva Myrdal, the Swedish representative at the CCD, "(i)n the view of the non-nuclear-weapon Powers, it is the tactical nuclear threat, rather than the one pertaining to strategic nuclear weapons, that today causes anxiety on their part."<sup>105</sup>

However, the agreements have their positive sides. As arms control measures, the ABM Treaty, for example, prohibits each

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<sup>103</sup> Strategic Survey 1972 (London : IISS, 1973), p. 4.

<sup>104</sup> For the text of President Carter's statement, see Documents on Disarmament, 1977, pp. 386-387.

<sup>105</sup> CCD/PV. 620, 9 Aug. 1973, pp. 13-14. Mrs. Myrdal feared that a State Party to the NPT might interpret the situation created by the new weapons as an extraordinary event allowing for withdrawal (p. 15).



Party from transferring to other States or deploying outside its national territory ABMs or their components. This, in fact, further restricts the freedom the two super-Powers enjoy under the NPT with regard to the transfer and deployment of nuclear delivery vehicles.<sup>106</sup> With the limitations on the ABMs systems, the development and deployment of MIRVs may no longer be necessary. Verification, provided for in the ABM Treaty and the Interim Agreement, by resorting to national technical means (mainly reconnaissance satellites), is of significant importance as a precedent for future arms control measures. This type of verification is a sort of legalisation of the mutual intelligence and espionage already practiced in this domain by the two super-Powers. The agreements may also break the pattern of action and reaction which has plagued so far the arms race between the super-Powers.

The major virtue of the agreements is that they have created a psychological-political climate which has allowed certain progress to be achieved in different directions; such as, the reconciliation of the Federal Republic of Germany with its Eastern European neighbours, the convening of the Conference on European Security and Co-operation (CESC) and the holding of negotiations on Mutual and Balanced Force Reductions (MBFR) in central Europe.

(ii) Towards SALT II Agreement

As far as the direct relations between the two super-Powers were concerned, the psychological-political climate created by the SALT I agreements allowed for further negotiations towards a SALT II agreement. The second phase of the negotiations formally began in November 1972. The first concrete results

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106 The defence of Western Europe with an ABM system has never, however, been an attractive option. A.J. Pierre, "The SALT Agreements and Europe", pp. 286-287. One of the staunchest American supporters for the transfer and deployment of defensive missiles, provided that they could be used for defence alone, was Dr. Edward Teller. See Hearings on NPT, 1968, pp. 181-198.

achieved were the "Basic Principles of Negotiations on the Further Limitation of Strategic Offensive Arms" agreed upon on 21 June 1973 by President Richard Nixon and Party Secretary Leonid Brezhnev during the latter's visit to Washington, D.C.<sup>107</sup> The main new objectives set out by the new agreement were:

- The working out of a permanent agreement on more complete measures on the limitation of strategic offensive arms to be signed in 1974.
- The subsequent reduction of strategic offensive arms are envisaged.
- The limitations placed on strategic offensive weapons can apply both to their quantitative aspects as well as to their qualitative improvement.
- Pending the completion of the permanent agreement on strategic offensive arms, the achievement by both sides of agreements on separate measures to supplement the existing Interim Agreement.

On 3 July 1974, in Moscow, where President Richard Nixon was at the end of an official visit to the Soviet Union, a decision was reached by the Governments of the United States and the Soviet Union to seek a new SALT agreement covering the period up to 1985, rather than a permanent one as envisaged in the 1973 Agreement on Basic Principles.<sup>108</sup>

A few months later, on 24 November, at Vladivostok, President Gerald Ford and General Secretary Leonid Brezhnev concluded that favourable prospects existed for completing the work on the new agreement in 1975. They agreed that further negotiations would be based on the following provisions:

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107 For the text of the agreement, see DOSB, Vol. LXIX, No. 1778, 23 July 1973, p. 158.

108 For the relevant section of the text of the Joint American-Soviet Communiqué, see US ACDA, Documents on Disarmament, 1974 (Pub. No. 76, May 1976) (Washington, D.C.: US GPO, 1976), p. 234.

- The new agreement would incorporate the relevant provisions of the Interim Agreement of 1972.

- The new agreement would cover the period from October 1977, the date of the expiration of the Interim Agreement, through 31 December 1985.

- Based on the principle of equality and equal security, both sides would be entitled to have a certain agreed aggregate number of strategic delivery vehicles as well as a certain agreed aggregate number of ICBMs and SLBMs equipped with MIRVs.

- The new agreement would include a provision for further negotiations beginning no later than 1980-1981 on the question of further limitations and possible reductions of strategic arms in the period after 1985.

- Negotiations to work out the new agreement incorporating the foregoing points would resume in Geneva in January 1975.<sup>109</sup>

According to the Vladivostok Agreement, each side would be permitted to have 2,400 strategic delivery vehicles including 1,320 that could be armed with MIRVs. Those new ceilings were higher than those envisaged in the 1972 Interim Agreement.

In view of the serious shortcomings of the 1972 SALT Agreements, the rapid achievement of the goals set out in the "Basic Principles," and later in the Vladivostok Agreement, seemed primordial, had the super-Powers intended to participate in the 1975 NPT Review Conference with a new balance sheet on the cessation of the nuclear arms race prescribed by Article VI of the NPT. Having failed, however, to achieve a new SALT Agreement, the super-Powers had hardly been praised at the Review Conference for the results they had attained at Moscow in May 1972.

But even before the convening of the NPT Review Conference, the UN General Assembly, at each of its regular sessions since

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<sup>109</sup> For the full text of the Joint American-Soviet Statement, see Ibid., pp. 746-747.

the signing of SALT I Agreements, had adopted resolutions that reflected a sense of great interest in the on-going talks as well as a sense of urgency in widening their scope and accelerating their pace.

At the end of the general debate at the Review Conference, the President of the Conference, Mrs. Inga Thorsson of Sweden, expressed quite accurately the general view among the majority of non-nuclear-weapon States. She said that the nuclear-weapon States had not achieved results to the satisfaction of non-nuclear-weapon States Parties to the NPT in efforts towards genuine nuclear disarmament. She further pointed out that many non-nuclear-weapon States had referred to the need for a timetable for results to be achieved through the on-going bilateral negotiations, aiming at ending the quantitative and qualitative arms race, and reducing substantially the levels of nuclear armaments.<sup>110</sup>

A number of non-nuclear-weapon States, led by Mexico, proposed a draft Protocol II to be attached to the NPT whereby the United States and the Soviet Union would undertake, as soon as the number of Parties to the NPT had reached one hundred, to reduce by fifty percent the ceiling of 2,400 nuclear strategic delivery vehicles contemplated for each side under the Vladivostok accords. They would likewise undertake to reduce by fifty percent the ceiling of 1,320 strategic ballistic missiles which, under those accords, each side might equip with MIRVs. Moreover, they would undertake, once such reductions had been carried out, to reduce by ten percent the ceilings of 1,200 strategic nuclear delivery vehicles and of 660 strategic ballistic missiles that might be equipped with MIRVs, each time that ten additional States became Parties to the NPT.<sup>111</sup>

Another approach was proposed in a working paper drafted by Sweden and a number of non-nuclear-weapon States. The two

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110 Doc. NPT/CONF/26, 26 May 1975.

111 Doc. NPT/CONF/L.3/Rev. 1 in Doc. NPT/CONF/35/I, Ann. II, pp. 7-8.

super-Powers were urged to conclude, before the end of 1975, the second-stage agreement that was outlined at Vladivostok. They were also urged to enter immediately thereafter into negotiations to seek agreement on reductions in the levels of their strategic nuclear forces.<sup>112</sup>

The nuclear-weapon States and their close allies rejected those proposals, as well as another protocol on nuclear-weapon testing, as will be shown later, on three grounds. First, they were considered to be beyond the terms of reference of the Review Conference, especially that they sought in effect to amend the NPT without conforming to the amendment procedures prescribed by Article VIII of the Treaty. Moreover, the proposals were looked upon as interferences in US-Soviet relations.

Second, the nuclear-weapon States and their allies argued that SALT raised technically complex and serious issues which could not be resolved according to arbitrary timetables and random figures. Additional Protocol II was criticised because it based its procedures upon the Vladivostok accords, which were themselves still subject to continuing negotiation.

Third, it was argued that linking strategic arms limitations to additional adherence to the NPT was arbitrary.

Given the impasse, the President of the Conference drafted a compromise language which outlined the consensus of the non-nuclear-weapon States while avoiding criticisms of the nuclear-weapon States.<sup>113</sup>

The relevant part of the review of Article VI of the NPT in the Final Declaration of the Conference came to read as follows:

"The Conference appeals to the nuclear-  
weapon States Parties to the negotiations

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112 Doc. NPT/CONF/C.1/8, 20 May 1975 in Doc. NPT/CONF/35/II.

113 For the above summary see Postures for Non-Proliferation, pp. 131-138.

on the limitation of strategic arms to endeavour to conclude at the earliest possible date the new agreement that was outlined by their leaders in November 1974. The Conference looks forward to the commencement of follow-on negotiations on further limitations of, and significant reductions in, their nuclear weapons systems as soon as possible following the conclusion of such an agreement."<sup>114</sup>

In early 1975, the US and Soviet delegations in Geneva had already resumed negotiations, working toward an agreement based on the Vladivostok framework. It was during this time that a Joint Draft Text was first prepared and many limitations were agreed. During the negotiations, however, it became clear that there was fundamental disagreement between the two sides on two major issues: how cruise missiles, small highly maneuverable low-flying pilotless aircrafts, were to be addressed, and whether the new Soviet Backfire, a two-engine swing-wing bomber, would be considered a heavy bomber and therefore counted in the 2,400 aggregate agreed upon at Vladivostok. While there was disagreement on other issues such as MIRV verification provisions, restrictions on new systems, and missile throw weight ceilings, progress was made in these areas. However, the issues of cruise missiles and Backfire remained unresolved.

When the new American Administration took office in 1977, renewed emphasis was placed on the Strategic Arms Limitation Talks. Building on the work of the previous Administration, particularly the Vladivostok accord and the subsequent agreement on many issues in Geneva, the United States made a comprehensive proposal which was presented to the Soviets by Secretary of State Cyrus Vance in March 1977. This proposal would have added significant reductions and qualitative constraints to the ceilings which were agreed to at Vladivostok. At the same time, the United States also presented an alternative proposal for a SALT II agreement based on the framework

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<sup>114</sup> Doc. NPT/CONF/35/1, Ann. I, p. 8.

agreed to at Vladivostok, with the Backfire and cruise missile issues deferred until SALT III.

Both proposals were rejected by the Soviets as inconsistent with their understanding of the Vladivostok agreement.

In subsequent negotiations, the sides agreed on a general framework for SALT II which accommodated both the Soviet desire to retain the Vladivostok framework for an agreement, and the US desire for more comprehensive limitations in SALT II.

The agreement would consist of three parts:

- A Treaty which would be in force through 1985 based on the Vladivostok accord;

- A Protocol of about three years' duration which would cover certain issues such as cruise missile constraints, mobile ICBM limits, and qualitative constraints on ICBMs, while deferring further negotiations on these issues to SALT III;

- A Joint Statement of Principles which would be an agreed set of guidelines for future negotiations.

Within this framework, negotiations to resolve the remaining differences continued on several levels. President Carter, Secretary Vance, and Soviet Foreign Minister Andrei Gromyko met in Washington in September 1977. Further high-level meetings were held in Washington, Moscow, and Geneva during 1978.<sup>115</sup>

The on-going SALT negotiations had continued to attract wide attention, both in the UN General Assembly and in the CCD. The General Assembly had continued to adopt resolutions expressing concern about the continuing arms race and stress-

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115 US Department of State, Bureau of Public Affairs, The Strategic Arms Limitation Talks (Special Report 46 (Revised), May 1979) (Washington, D.C.: Department of State Publication 8952), pp. 5-6. For additional detail on the evolving of SALT II, see Richard Burt, "The Scope and Limits of SALT," Foreign Affairs, Vol. 56, No. 4, July 1978, pp. 751-770 and Jan M. Lodal, "SALT II and American Security," Foreign Affairs, Vol. 57, No. 2, Winter 1978/1979, pp. 245-268.

ing the urgency of reaching an agreement on quantitative reductions and on restrictions of qualitative improvements of nuclear weapons. SALT negotiations were one of the issues which received the greatest attention in the course of the Special Session of the General Assembly devoted to disarmament in 1978.<sup>116</sup>

At the Special Session, the statements made on this issue ranged from those expressing confidence in the rapid and successful conclusion of the on-going bilateral negotiations, to those which voiced certain dissatisfaction and disappointment that agreement had not yet been reached. Many of them also indicated that the eventual agreement should provide for substantial reduction of the numbers of strategic weapons systems and limitation of their qualitative improvements. Most of them, however, acknowledged in one way or another, the rather delicate nature of the negotiations, as well as their overall importance for the strengthening of international peace and security and facilitating disarmament efforts in general.<sup>117</sup>

After prolonged negotiations at the Special Session, the following paragraph was included in its Final Document:

"The Union of Soviet Socialist Republics and the United States of America should conclude at the earliest possible date the agreement they have been pursuing for several years in the second series of the strategic arms limitation talks. They are invited to transmit in good time the text of the Agreement to the General Assembly. It should be followed promptly by further strategic arms limitation negotiations between the two parties, leading to agreed significant reductions of, and qualitative limitations on, strategic arms. It should constitute an important step in the direction of nuclear disarmament and, ultimately, of establishment of a world free of such weapons."<sup>118</sup>

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116 See NPT/CONF.II/PC.II/5, 6 Aug. 1979, p. 6.

117 For a summary of the discussions at the Special Session, see The United Nations Disarmament Yearbook, Vol. 3: 1978, Chapters I and II; and pp. 188-191.

118 See Appendix 22, para. 52.



At the following 33rd regular session of the General Assembly, concern about the lack of definitive results was much more pronounced, to the extent that one country, Mexico, was of the opinion that the fact that only three months had elapsed since the Special Session, could not be used as an excuse for not achieving the expected results. On behalf of 15 countries, Mexico introduced a draft resolution, which was adopted by the Assembly with a fairly large majority. The resolution, while expressing deep regret that it had not been possible to achieve definitive results on SALT, reiterated the trust of the Assembly that the two super-Powers would transmit to it, in good time, the text of the agreement.<sup>119</sup>

This time it took the two super-Powers six months to finally reach a new agreement.

(iii) SALT II Agreement, 1979

On 18 June 1979 in Vienna, President Jimmy Carter and General Secretary Leonid Brezhnev, signed on behalf of their countries, a Treaty consisting of 19 Articles embodying the major limits and controls on strategic offensive weapons with a term extending to 31 December 1985, and a Protocol to the Treaty, consisting of 4 Articles, limiting certain strategic offensive nuclear weapons not yet deployed by either the United States or the Soviet Union with a term extending through 31 December 1981. To minimize ambiguities and misunderstandings, the Articles of the Treaty and the Protocol are supplemented by 51 Agreed Statements and 47 Common Understandings which specify the precise meaning of the provisions to which they are attached. Apart from the Treaty and its Protocol, the two super-Powers have reached agreement on a Joint Statement of Principles and Basic Guidelines setting forth the intent of the two Parties with respect to the objectives of SALT III, and a Memorandum of Understanding establishing an agreed data base for certain categories of strategic

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<sup>119</sup> The United Nations Disarmament Yearbook, Vol. 3: 1978,  
pp. 192-196.

offensive arms on both sides to be updated semi-annually. The Memorandum is supplemented by Statements of Data which provide the numbers of strategic offensive weapons on both sides as of 18 June 1979. Moreover, closely related to these undertakings is the Soviet Backfire Statement pledging to restrain the capability, the production and the radius of action of the Backfire, and the response of President Carter to this statement.<sup>120</sup>

We shall endeavour to summarize and analyze the Agreement and the related undertakings, as we have previously done with regard to SALT I Agreements, from one basic angle relevant to this study, namely, how far SALT II Agreement constitutes a cessation of the nuclear arms race quantitatively and qualitatively in fulfillment of the super-Powers' obligations under Article VI of the NPT. But before doing so, it would be quite pertinent to underline the link between the NPT and the SALT II Agreement as clearly conceived by the Parties to the Agreement themselves.

In the preambular part of the Treaty, the United States and the Soviet Union are "mindful of their obligations under Article VI of the (NPT)." Moreover, in their Joint Communiqué issued at Vienna on 18 June 1979, President Carter and General Secretary Brezhnev "noted the profound threat posed to world security by the proliferation of nuclear weapons, and agreed that the states already possessing nuclear weapons bear a special responsibility to demonstrate restraint. To this end, they affirmed their joint conviction that further efforts are needed, including on a regional basis, and expressed the hope that the conclusion of SALT II Treaty will make an important contribution toward non-proliferation objectives." They further "committed themselves to close co-operation, along with other countries, to insure a successful conclusion to the "NPT"

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<sup>120</sup> SALT II documents are reproduced in Appendix 23.

Review Conference in 1980, and called upon all States which have not already done so to sign and ratify the (NPT)."<sup>121</sup>

In one of the several statements made by Secretary of State Cyrus Vance on the non-proliferation aspects of SALT II Agreement, he said quite emphatically before the Senate Committee on Foreign Relations on 10 July 1979 that a dozen nations capable of developing nuclear weapons within two years of making such a decision "will be less likely to exercise restraint if they see the two nuclear super-Powers unable to agree about nuclear restraint." He went on to say that progress in fulfilling the obligation to pursue effective arms control measures by the nuclear-weapon States would be a major focus of the NPT Review Conference in 1980, and that without the SALT II Agreement "the authority of our efforts to halt the worldwide spread of nuclear weapons would be undermined."<sup>122</sup>

On the same day the Director of the US Arms Control and Disarmament Agency, George Seignious, told the same Committee that if SALT II were rejected, some non-parties to the NPT or the Treaty of Tlatelolco could use the failure of SALT II to justify their own continued refusal to undertake an obligation not to develop nuclear weapons. Even the Parties to the NPT, he said, might use the failure of SALT II as an excuse - or a reason - to reconsider their commitment to the NPT when the Review Conference commences in 1980.<sup>123</sup>

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121 See US Department of State, Bureau of Public Affairs, Vienna Summit, June 15-18, 1979 (Selected Documents No. 13) (Washington, D.C.: Department of State Publication 8985, June 1979), p. 7.

122 US Congress, Senate, Committee on Foreign Relations, Report Together with Supplemental and Minority Views: The SALT II Treaty, Senate Executive Report No. 96-14, 96th Congress, 1st Session (Washington, D.C.: US GPO, 1979), p. 304, hereinafter cited as Report on the SALT II Treaty.

123 US Department of State, Bureau of Public Affairs, SALT II Senate Testimony, July 9-11, 1979 (Current Policy No. 72A) (Washington, D.C., Department of State Publication 8989, July 1979), p. 25.

In a nutshell, the SALT II Agreement can be summarised and read as follows:<sup>124</sup>

### The Treaty

The provisions of the Treaty fall into three major categories: quantitative limits, qualitative restrictions and verification measures as follows:

- Quantitative Limits: The treaty restricts the United States and the Soviet Union to an equal, overall total of strategic nuclear delivery vehicles. The equality of this limitation redresses an imbalance in favor of the USSR that has existed since prior to the signing of the SALT I agreements. The units to be included under this ceiling are ICBM launchers, SLBM launchers, heavy bombers, and air-to-surface ballistic missiles (ASBMs) with ranges over 600 km. Within this agreed ceiling, a number of subceilings have been placed on specific types of nuclear systems.

The initial ceiling for all ICBM launchers, SLBM launchers, heavy bombers, and ASBMs is 2,400. This ceiling will be reduced to 2,250 by December 31, 1981. Under these limits, the Soviet Union, now at a level of about 2,520, will be required to remove about 270 strategic nuclear delivery vehicles from its weapons inventory, while the United States, now at a level of about 2,060 operational systems, will be allowed to augment its strategic forces slightly under the terms of the overall ceiling. This limitation will also prevent the Soviet Union from further expanding its current strategic forces to a level of as much as 3,000 delivery systems that in US estimates could be deployed by the end of 1985. A subceiling of 1,320 applies to the total number of launchers of strategic ballistic missiles equipped with MIRVs plus heavy bombers equipped with cruise missiles with ranges over 600 km.

An additional subceiling of 1,200 applies to the total

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<sup>124</sup> The summary, unless otherwise indicated, is essentially based on US Department of State, Bureau of Public Affairs, SALT II Basic Guide (A Special Report) (Washington, D.C.: Department of State Publication 8974, May 1979); and Report on The SALT II Treaty, pp. 8-9.

number of launchers of MIRVed ballistic missiles. The US view is that the USSR could deploy several hundred MIRVed missile launchers in excess of this total in the absence of a SALT II agreement.

The final subceiling restricts each nation to the deployment of no more than 820 MIRVed ICBM launchers. This restriction is especially important to the United States because it will limit the deployment of MIRVed systems by the USSR and because MIRVed ICBMs are potentially the most destabilizing type of strategic nuclear delivery vehicle.

The construction of additional fixed ICBM launchers is banned by the SALT II treaty, and neither nation is permitted to increase the number of its fixed launchers for heavy ICBMs - defined as ICBMs with a launch-weight (weight of the total missile) or throw-weight (weight of the useful payload of the missile) greater than that of the Soviet SS-19 missile. The Soviet Union is the only nation which has deployed modern, large ballistic missiles of this type.

The chart as shown below may render the quantitative limits clearer when also compared with the numbers of strategic offensive arms possessed by the two super-Powers

Strategic Offensive Arms of the US and USSR as of 18 June 1979 and SALT II Limits*			
Strategic Offensive Arms	Deployed 18 June 1979		SALT II Limits
	US	USSR	
Total number	2,283	2,504	- 2,400 initial ceiling to be reduced to 2,250 by 31 December 1981
Heavy bombers unequipped for ALCMs or ASBMs (with MIRVs) with ranges over 600 km.	570 <sup>(1)</sup>	156	- 2,250 aggregate ceiling on strategic nuclear delivery vehicles for each Party as of 31 December 1981
Launchers for ICBMs not equipped for MIRVs	504	790	
Launchers for SLBMs not equipped for MIRVs	160	806	
ASBMs	0	0	
Heavy bombers equipped for ALCMs with range over 600 km.	3	0	- 1,320 sub-ceiling on MIRVed ballistic missiles and aircraft equipped for long-range cruise missiles
Launchers for SLEMs equipped for MIRVs	496	144	- 1,200 sub-ceiling on MIRVed ballistic missiles (land, sea or air launched)
ASBMs equipped for MIRVs	0	0	
Launchers for ICBMs equipped for MIRVs	550	608	- 820 sub-ceiling land-based MIRVed ballistic missiles

\* This chart is based with minor changes on a table in Arms Control Today, Vol. 9 No. 7, July/August 1979, p. 3.

(1) They include 228 Mothballed B-52 bombers.

as of 18 June 1979 and which are subject to the limitations provided for in the Treaty.

- Qualitative Restrictions: The treaty places a number of qualitative restrictions on the development and deployment of new types of nuclear weapons.

The number of warheads on currently existing types of ICBMs is frozen at existing levels, i.e., at the maximum number tested on each particular type of ICBM, as a means of slowing the expansion in the number of nuclear warheads. As a consequence, the Soviets will be permitted a maximum of 10 warheads on their heavy missiles - whereas without this limit, in the US view they might easily deploy 20 or 30 warheads on a modification of the SS-18.

SLBMs will be limited to no more than 14 warheads, the maximum number that has been tested by either side to date.

The throw-weight and total-missile weight of light ICBMs, SLBMs, and ASBMs cannot exceed that of the Soviet SS-19; similar limits apply to increasing the throw-weight and launch-weight of heavy ICBMs beyond those of the SS-18. This will limit the further growth in the payload delivery capability of missiles.

Each side will be permitted to test and deploy only one new type of ICBM for the duration of the treaty. This exception gives the United States the right to proceed with the M-X missile, a sheltered road-missile system.<sup>125</sup> In this case, however, as will be shown below, mobile ICBM launchers or flight testing of ICBMs from such launchers cannot take place before the expiration of the duration of the Protocol to the Treaty. On the other hand, in permitting the Soviets only one new type of ICBM, this provision will inhibit the Soviets in their past practice of deploying three or four completely new types of ICBMs, with substantially different and improved characteristics, with each new generation of ICBMs.

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125 For an extensive explanation of the M-X missile system, see President Carter's Remarks on 7 September 1979 in DOSB, Vol. 79, No. 2032, Nov. 1979, pp. 25-26.

The permitted new type of ICBM must be a light ICBM (i.e., its throw-weight cannot exceed that of the SS-19), and it cannot have more than 10 warheads. The Soviet Union may choose to use its exemption to deploy a single warhead missile, or it may deploy a new MIRVed missile to replace the SS-17 and SS-19. The M-X missile will probably carry the maximum permitted number of 10 warheads and will have three times the throw-weight of the Minuteman.

The average number of long-range (i.e., over 600 km) cruise missiles that can be deployed by either nation aboard its airplanes equipped for such missiles can be no greater than 28. The maximum number of long-range cruise missiles that can be deployed on existing heavy bombers, such as the B-52, is limited to 20. Any aircraft that is equipped with long-range air-launched cruise missile (ALCM) is counted as an ALCM-carrying heavy bomber and is included in the SALT II numerical aggregates.

- Verification Measures: The Treaty contains a number of provisions designed to enhance the ability to police the conduct of the Parties with regard to weapons included in the Treaty.

The Treaty prohibits any deliberate concealment activities which impede verification of compliance with the provisions of the agreement. A clarification to this provision notes that any telemetry encryption (that is, the encoding of missile and aircraft test data) which impedes verification is banned.

The agreement also forbids any interference by one nation with the operation of the intelligence collection systems (referred to in the treaty as "national technical means" or "NTM") belonging to the other nation and used to verify compliance with the provisions of the agreement.

Since it is difficult to distinguish between MIRVed and non-MIRVed types of missiles once they have been deployed, the agreement sets forth a set of MIRV counting rules which provide that: (a) all missiles of a type that has been tested with MIRVs shall be counted as MIRVed, even if they are de-

ployed with single re-entry vehicles; and (b) all launchers of a type that has contained or launched MIRVed missiles will be counted as MIRVed, even if they contain non-MIRVed missiles.

Because the Soviet SS-16 ICBM shares certain similarities with the mobile SS-20 IRBM, including a potential capability to be launched by the mobile SS-20 launcher, the Soviet Union has agreed to an outright ban on the deployment, further testing, and production of the SS-16, including the production of component parts unique to the SS-16.

Both nations are required by the treaty to notify the other side in advance of certain ICBM test launches.

Both nations will provide figures on their own strategic offensive forces as part of an agreed data base.

The treaty provides a mechanism for promptly considering any ambiguous situations that may arise in the future and for overseeing the orderly implementation of the provisions of SALT II in the US-Soviet Standing Consultative Commission (SCC), which was previously established by the 1972 ABM Treaty. It has served as the established means of monitoring the implementation of the SALT I Interim Agreement as well and in providing a continuing forum for further discussions between the two sides with respect to these agreements.

National technical means used for verification include satellites (such as photoreconnaissance satellites), ground-based systems (such as radars which observe missile tests and antennas which collect telemetry), and aircraft-based systems (including optical systems and other sensors). Thus, neither side is dependent on trust to verify compliance with the provisions of the agreement.

#### The Protocol

The protocol would enter into force at the same time as the treaty, but it would expire as earlier mentioned at a considerably earlier date--December 31, 1981. It places temporary limitations on certain systems with regard to which the sides could not reach long-term resolution. These limitations are:



- The deployment of mobile ICBM launchers and the flight-testing of ICBMs from such launchers are banned. Development and testing of the launchers alone, however, are not restricted.

- The flight-testing and deployment of air-to-surface ballistic missiles with ranges over 600 km are banned.

- The deployment of ground-launched and sea-launched cruise missiles is limited to cruise missiles not capable of a range of more than 600 kilometers, or about 350 miles.

- There are no other restrictions on the development or flight-testing of ground- and sea-launched cruise missiles, and the 600-kilometer deployment limitations will expire before the United States will be ready to deploy these systems. There are no limitations in the protocol on the range, development, flight-testing, or deployment of air-launched cruise missiles. Air-launched cruise missiles are included in the 1,320 aggregate of the treaty.

#### The Joint Statement of Principles

SALT II is one part of a continuing process of arms control negotiations between the United States and the Soviet Union. This fact is reflected in the joint statement of principles and basic guidelines for subsequent negotiations, which declares that the two sides have agreed to work for further reductions and for further qualitative limitations on their strategic forces and to attempt to resolve the issues included in the protocol to the treaty. In addition, it is explicitly noted each side may raise any other topic it wishes in the SALT III negotiations.

It was further agreed that further limitations and reductions must be subject to adequate verification by national technical means, using additionally, as appropriate, co-operative measures.

#### The Backfire Statements

The Soviet Union has undertaken commitments not to increase the rate of production of the Backfire bomber above its cur-

rent rate and to limit upgrading of the capabilities of this aircraft so it could not operate at international distances. In this connection, the Soviet Union has also undertaken not to increase the radius of action of their airplane in such a way as to enable it to strike targets on the territory of the United States. The freeze on the Backfire production rate at its current level means that the Soviets are committed not to produce more than 30 Backfires per year. The United States considers the obligations set forth on Backfire as essential to the integrity of the obligations of the treaty as a whole. The United States has the right of a comparable aircraft not to be constrained by SALT II.

In the American debate, it has been emphasized that the SALT II agreement in providing for equality of rights and limitations, is an important improvement over the asymmetrical limitations of SALT I Interim Agreement, and a principle that must be firmly adhered to in subsequent negotiations. It has also been pointed out that the structure, the ceilings and sub-ceilings, the qualitative controls, and the verification provisions provide an important basis for taking further steps in SALT III toward controlling and reducing strategic weaponry.

Having summarised the SALT II Treaty and related documents, we turn now to their evaluation as measures aimed at the "cessation of the nuclear arms race" prescribed by Article VI of the NPT.

In terms of their quantitative aspects the SALT II agreement sets numerical ceilings and sub-ceilings on strategic nuclear delivery vehicles, which would lead for the first time to the dismantling on the part of the Soviet Union of some 250 deployed offensive nuclear-weapon systems without replacement. However, the Agreement might allow an increase in the number of nuclear delivery vehicles on the part of the United States, which is still below the ceilings set therein. It would have been preferable had it been possible to set the ceilings at a lower level in order to accommodate the present US operational

systems and even further below. It is quite regrettable that almost five years after Vladivostok the ceilings have not been significantly changed.

With regard to the limits on the numbers of warheads, although no increase is to take place in the number of warheads on existing ICBMs, the number of warheads on each of the new ICBMs, SLBMs and ASBMs have been set very high, i.e., 10, 14, and 10 respectively. The dismantling of some 250 launchers by the Soviet Union, would be compensated by the increase in the number of warheads in the other nuclear vehicles. It would have been preferable to reach an understanding to limit if not eliminate altogether these systems.

This would bring us to the qualitative aspects of the SALT II agreement. The new agreement, as its predecessors the SALT I agreements, continues to transform the arms race into a qualitatively renewed nuclear arms race. Although additional fixed ICBM launchers or conversion of fixed launchers from light to heavy ICBMs or new types of heavy ICBMs are not allowed under the SALT II agreement, a new type of light ICBMs is allowed to each Party. It would allow the United States to develop and later deploy the M-X missiles as well as the Soviet Union to develop and deploy another new type of missiles, possibly the SS-18. The M-X missiles have even revived the need for deploying ABMs to protect the new missiles from a massive preemptive strike.<sup>126</sup>

Moreover, the SALT II agreement would not inhibit, for example, the deployment of the new Trident C4 missile in the US submarine fleet, which is expected to take place in 1981. Work has also begun on a substantially improved Trident II submarine-launched missile. The cruise missile programs will also continue unabated. The Soviet Backfire must also incite the United States to develop a comparable aircraft, both of which can later be upgraded to carry out intercontinental missions.

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<sup>126</sup> See the Washington Post, 15 Oct. 1979.

Significantly too, MIRV has recently been found not to be a perfect delivery system. At present a maneuverable re-entry vehicle (MARV) is at an advanced stage of development. MARV can change direction in the terminal stages of its trajectory so as to render defence more difficult. If combined with developments taking place in terminal guidance systems, it can provide MARVed missiles with pinpoint accuracies of a few tens of metres instead of current accuracies of somewhat less than one km.<sup>127</sup>

All of the above developments give the impression that there is a shift to a posture of an offensive nuclear capability, as opposed to the present posture of deterring nuclear attack. What is also apparent is that the curtailment of quantitative increases in the strategic nuclear delivery vehicles was meant to give more room and devote more funds for the important qualitative improvements of the nuclear arsenals of the two super-Powers. In the United States, for example, it is argued that the SALT II agreement is acceptable so long as the development of certain new weapon-systems remain unhindered.

These new systems would also entail an increase in the military budget from three to five percent above the inflation rate. Although it is true that without the SALT II agreement, much more resources and budget allocations might have been needed on both sides to feed an unrestrained nuclear arms race, nevertheless, the opportunity was there to stop once and for all the quantitative and qualitative arms race and devote the ensuing freed resources to the economic and social development of the needed areas of the world.

It is equally unfortunate that no permanent agreement on strategic arms as earlier envisaged has been possible. Such an agreement could have instituted a built-in mechanism for a continuous process of arms limitations and reductions.

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<sup>127</sup> Economic and Social Consequences of the Arms Race and of Military Expenditures (A/32/88/Rev.1), para. 27.

However, in a real world fraught with danger as a result of US-Soviet confrontation and competition, the SALT II agreement is not deprived, after all, from positive aspects. It has established a principle of equality between the two Super-Powers in developing their strategic nuclear weapons. It also has introduced an element of predictability which would allow each Party to measure more easily the moves of his counterpart. Both equality and predictability would thus contribute to the stability of the super-Powers' rivalry.

The dismantling for the first time in the nuclear age of whatever nuclear delivery vehicles is an event in itself, regardless of its marginal effect on the on-going nuclear arms race. The limitations imposed on certain existing or potential nuclear weapon-systems are of no less importance.

The major virtue of the SALT II agreement is that both the United States and the Soviet Union were willing and have managed once more in a troubled world to reach agreement on such a vital issue not only to their mutual security but also to the security of the world at large.

In view of the recent events that moved the United States and the Soviet Union further apart, namely, the presence of Soviet combat troops in Cuba, the Iran Crisis and the military intervention of the Soviet Union in Afghanistan; the SALT II agreement has been jeopardized, hopefully temporarily and possibly until the American Presidential elections are over by the end of 1980.

In spite of all the shortcomings of the SALT II agreement, its prompt ratification by both Parties and its entry into force would constitute a corner stone for future endeavours.

The agreement has already been welcomed by the allies of both Parties as an instrument contributing to their stability and security. As to the non-aligned nations, it was no surprise to find out that the Heads of State or Government of the non-aligned countries meeting in Havana, Cuba, during the month of September 1979, while welcoming the signing of the agreement still noted with regret that the agreement fell short

of the expectations of the international community. They expressed hope that the two super-Powers would urgently conclude a new agreement which would lead to genuine disarmament weapons, particularly in the field of nuclear disarmament.<sup>128</sup>

At the 34th session of the UN General Assembly while welcoming the agreement, the Assembly has noted that it has not been possible for the agreement to go beyond certain limitations which, taken together, permit considerable increments, both quantitatively and qualitatively, in relation to the levels of nuclear arsenals existing at present. The Assembly trusted that future negotiations would begin promptly after the entry into force of the Agreement, with the objective of concluding a SALT III agreement that would constitute an important step towards a final goal of achieving the complete and total destruction of existing stockpiles of nuclear weapons.<sup>129</sup>

Other arms control measures are very much related to the fate of SALT II agreement. Foremost among them is the conclusion of a comprehensive test ban which would also be a significant restraint on the arms race. This would lead us to the examination of the potentialities of achieving such a ban.

(b) The Achievement of a Comprehensive Test Ban

(i) The Early Efforts Following the Partial Test Ban Treaty

Many years have elapsed since the Partial Test-Ban Treaty was signed in Moscow on 5 August 1963. The pledge given by the Original Parties to the Treaty, i.e., the United Kingdom, the Soviet Union and the United States, to negotiate the discontinuance of all test explosions of nuclear weapons for all time, has not yet been fulfilled.

When the Moscow Test-Ban Treaty was signed, it was hoped

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<sup>128</sup> UN Doc. A/34/542, 11 Oct. 1979, para. 222.

<sup>129</sup> UN Doc. A/Res/87F, 17 Jan. 1980. The resolution adopted by the Assembly was sponsored by Argentina, Australia, Egypt, Ethiopia, Mexico, Nigeria, Pakistan, Peru, Sweden, and Uruguay.

not only that the protection of the environment would be enhanced, saving humanity from the hazards of radioactive contamination, but also that the nuclear arms race would be considerably affected, limiting the capabilities of the super-Powers in perfecting their nuclear weaponry. No doubt the Treaty has contributed to a substantial reduction of radioactive contamination, in spite of the atmospheric testing by China and France. It has also contributed to imposing certain limitations on testing, for example, the effects of the multi-megaton explosives on hard-missile sites (the Soviets are reported to have gained considerable results in this domain not available to the United States) on testing certain aspects of the performance of ABM systems, such as resistance to Blackout, which is the paralysing effect of the fireball of a nuclear explosion on radars and communications, and also the effect of an ABM and its kill radiation on an incoming warhead.<sup>130</sup> In other words, limitations were imposed on certain proof tests, i.e., test of newly-designed weapons, to see whether they worked as intended and expected, and effects tests, i.e., tests to determine the effect of detonations on military equipment including nuclear warheads, materials, electronic devices, and so on.<sup>131</sup>

However, the above-mentioned limitations under the Partial Test-Ban Treaty proved to be of marginal utility in halting the qualitative nuclear arms race. In some cases it was possible to design new weapons systems around some uncertainties. In other cases underground testing allowed, for example, the weaponization of a variety of possible ABM warheads, MIRVs and the minaturization of tactical nuclear weapons. The continuation of underground testing would also allow for research and development (R & D) tests to investigate entirely new principles in weapons' design such as laser-initiated pure fusion

<sup>130</sup> See Hearings on Test Ban, pp. 103-104 (Secretary of Defence Robert McNamara) and p. 245 (Chairman of the US AEC Dr. Glenn Seaborg).

<sup>131</sup> For an assessment of the military significance of nuclear testing, see The Test Ban (Stockholm: SIPRI Research Report, 1971), pp. 27-31.

bombs, neutron bombs, or further major advances in yield to weight ratios for very small weapons.<sup>132</sup>

Therefore, extending the prohibition on testing to the underground environment would have a considerable effect on the qualitative arms race. Although such a move would not prevent the design of some weapons systems around some uncertainties, some limitations can be investigated and worked out for controlling research and development.

Moreover, the international observation and international procedures required for carrying out peaceful nuclear explosions, when they become feasible, should guard against using such explosions as a smoke-screen for testing new weapons systems.<sup>133</sup>

The effect of the Partial Test-Ban Treaty on the acquisition of nuclear weapons by new States is not negligible. With the permitted underground testing, the Treaty would at least retard progress towards acquisition in cases where the added costs and the difficulty of testing in this environment were not sufficient to preclude it altogether. The States which have also signed the NPT have, in fact, virtually signed a comprehensive test-ban treaty. A comprehensive test ban would not only help to redress the balance of obligations and responsibilities between the nuclear and the non-nuclear-weapon States, but would be a parallel non-proliferation measure to the NPT for all those who continued to refuse to sign the NPT.

A case in point is India's refusal to adhere to the NPT, if not the impossibility for her to adhere after exploding its "peaceful" nuclear device in May 1974. A comprehensive test-ban treaty which would exempt peaceful nuclear explosions under specific procedures and regulations may induce India as well as Pakistan to adhere to it. Both are long time champions of the conclusion of comprehensive test ban. If

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<sup>132</sup> Ibid., p. 29.

<sup>133</sup> See Chapter 7.



this were to happen the cause of non-proliferation would be greatly enhanced in this part of the world.

The achievement of an effective comprehensive test ban encounters, however, two major difficulties; universality of adherence and verification.

The Partial Test-Ban Treaty is much affected by the refusal of two nuclear-weapon States to abide by its provisions, i.e., France and the People's Republic of China. Both countries are unwilling to sign a treaty which would deprive them of the right of developing and strengthening their national deterrent forces. Both countries consider nuclear disarmament to be the proper path to follow and not merely a ban on nuclear weapons for those who do not have them.<sup>134</sup>

As rightly noted by SIPRI, the main criticism directed against atmospheric testing was directed against France, probably because, unlike China, France had not been conducting them on its own territory, but in the Pacific (Mururoa).<sup>135</sup> The French attitude had even led Australia and New Zealand to ask the International Court of Justice (ICJ) to declare that the carrying out of further atmospheric nuclear tests in the Pacific Ocean is contrary to international law, and to order the French Government not to carry out such tests. At the same time, both countries asked the Court for interim measures of protection ordering France not to hold any tests pending the Court's judgment. In spite of France's objection to the Court's jurisdiction in disputes concerning activities relating to national defence exempted by France when accepting the Court's jurisdiction in May 1966, the Court, on 22 June 1973, by a vote of 8 to 6, ordered the interim measures that Australia and New Zealand had been seeking.<sup>136</sup> As a conse-

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<sup>134</sup> For the first reactions of France and China to the Treaty, which basically have not changed to this date of writing, see The New York Times, 18 and 30 July and 29 Sept. 1963.

<sup>135</sup> SIPRI Yearbook 1973, p. 427.

<sup>136</sup> See Rosalyn Higgins, "French Tests and the International Court," The World Today, Vol. 29, No. 7, July 1973, pp.

quence, the French Government decided, as of 10 January 1974, to renounce the compulsory jurisdiction of the Court.<sup>137</sup>

On 20 December 1974, the Court, by 9 votes to 6, held that the unilateral declarations made by the French President and other officials of the French Government of France's intention to discontinue atmospheric nuclear testing following the conclusion of the 1974 series of tests constituted a legal undertaking by France to such effect, and, as the objectives of Australia and New Zealand had been achieved, the Court was not called upon to give a decision thereon.<sup>138</sup>

The continuation of nuclear testing by France (underground since 1975) and China has dimmed the chances of the achievement of a comprehensive test ban by the two super-Powers. Since 1973, the Soviet Union requires that nuclear tests, including tests underground, must be stopped everywhere and by all. In its view, all the nuclear-weapon States should participate in negotiations on the cessation of all nuclear tests.<sup>139</sup>

The new Soviet attitude has developed at a time when verification of underground testing appears to be much less of a problem than a few years ago. Verification was a stumbling block for reaching a comprehensive test ban in 1963. It re-

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277-280. For the reasoning of the Court, see Nuclear Tests Case (Australia v. France) and (New Zealand v. France), ICJ, Orders of 22 June 1973, Reports (1973), pp. 99-106 and 135-143 respectively.

137 Le Monde, 20-21 Jan. 1974.

138 Nuclear Tests Case (Australia v. France) and (New Zealand v. France), ICJ, Report of Judgments, Advisory Opinion and Orders (1974), Judgments of 20 December 1974, pp. 253-455 and 457-528 respectively. For a summary of the Case see Ronald H. Severaid and James C. Tuttle (eds.), International Court of Justice Opinion Briefs (The American Bar Association, Section of International Law, 1978), pp. 25-1/2. See also Serge Sur, "Les affaires des essais nucléaires (Australie c. France, Nouvelle-Zélande c. France, C.I.J.-Arrêts du 20 Décembre 1974)," Revue Générale de Droit International Public, 79<sup>e</sup> année, No. 4 Octobre-Décembre 1975, pp. 972-1027.

139 CCD/PV. 585, 20 Feb. 1973, pp. 18-19.

mains so to this date of writing. The Soviet Union continues to contend that national means of detection and identification are sufficient to verify the observance by States of the obligations assumed by them by virtue of an underground test ban. On the other hand, the United States continues to reaffirm its view that despite the substantial progress in detecting and identifying seismic events, including underground tests, national means of verification still should be supplemented by some on-site inspection.<sup>140</sup>

The controversy between the two super-Powers over verification has appeared to many countries as a pretext to continue their underground testing in search for new and more deadly weapons. However, in cognisance of this fact, a number of suggestions and formal proposals were submitted at the ENDC and later at the CCD and the CD, in order to halt testing underground.

Before the conclusion of the Threshold Test Ban Treaty of 1974, the significant proposals which were put forward since 1963 centred around the following basic ideas:<sup>141</sup>

- The prohibition, by means of an agreement, of underground nuclear tests above some threshold which could be detected and identified by seismic methods. The threshold has been suggested at 4.75 or 4.0 seismic magnitude on the Richter scale.

The idea of a threshold agreement was at one point connected with the proposal for an unverified moratorium on underground testing below the threshold specified and the improvement, through international co-operation between national institutions, of the seismic data generally available, so as to create a better scientific basis for the evaluation of seismic events (the so-called detection club). The UAR was the first to suggest this three-pronged approach.

It had also been suggested that the threshold could be progressively reduced with the continuous improvement of de-

140 See CCD/418, 30 Aug. 1973, paras. 156-157.

141 See, for example, A/CONF.35/Doc. 14, 26 Aug. 1968, paras. 5-11 and 17-18, and CCD/418, 30 Aug. 1973, paras. 155-181.

tection and identification techniques. A reciprocal commitment to reduce significantly the size and number of nuclear-weapon tests was also suggested by one country, Canada.

- The conclusion of an underground test ban without obligatory on-site inspection but linked to a so-called "verification by challenge," a system whereby a State suspected of underground nuclear-weapon testing would be challenged to provide all available reassuring information, including possibly an invitation for inspection. The system would be related to rules for a possible withdrawal from the agreement if explanations, forthcoming after formal allegations had been made, were not found satisfactory. This idea was put forward by Sweden. It was also connected with international co-operation in exchanging seismic data.

The UAR suggested the combination of the idea of "verification by challenge" with its three-pronged approach.

- The prohibition of all testing by means of a moratorium as suggested by Sweden in 1973 or by means of a unilateral suspension of tests as suggested by Nigeria also in 1973.

Throughout the discussions which have taken place during this period in the ENDC and the CCD, technical and scientific data have been provided on detection and identification techniques of underground events, including nuclear-weapon testing. However, in order to grasp and tackle in depth those aspects in connection with an underground test ban, informal meetings took place in Geneva on 10-13 July 1973, at the request of Japan supported by other States, between the members of the CCD and a group of technical experts from nine member States. Several scientific and technical documents were presented by Canada, Italy, Japan, Sweden and the United States for discussion at these informal meetings. Other similar documents were presented to the CCD that year by the Netherlands and the United Kingdom. On the basis of these documents and discussions, it was estimated that a range of underground nuclear explosions of 1 to 2 kilotons could escape detection if seismic observation were made at a distance of more than 1000 km.

from the source. This proved that great improvements had been accomplished in the field of detection and identification of underground events.

Of all the suggestions and proposals suggested above, the Soviet Union declared itself ready to accept the three-pronged approach suggested by the UAR in 1965, an approach unwelcomed by the United States which was not in favour of an unverified moratorium. However, the Soviet Union in 1973 reversed its previous position and became hostile to any approach based on partial measures. In its view, partial measures or unilateral action by nuclear Powers would give some States unfair advantages over others and would constitute a departure from the principle of equal security. Moreover, it considered that partial prohibition would raise technical difficulties, for if not all but only some tests were banned, the so-called deterrent factor would disappear, i.e., it would be possible in the case of a suspected breach to claim that the explosion set off was not covered by the ban.<sup>142</sup>

This change in the Soviet attitude could be linked to its above-mentioned change in attitude regarding the necessity of the participation of France and China in a future comprehensive test ban. How could these two changes of attitude be interpreted? Was it the rapid pace with which the French and the Chinese, especially the latter, were moving towards a more sophisticated nuclear arsenal? Or, was it a pretext to continue testing underground in order to catch up with the Americans in the qualitative nuclear arms race, especially with regard to MIRVs? We do not exclude an affirmative answer to the latter two questions, as we do not exclude either the American on-site-inspection argument as a pretext to continue the qualitative nuclear arms race.

When the United States signed the Partial Test-Ban Treaty, it was aware of the fact that certain tests in the three environments covered by the Treaty, i.e., the atmosphere, outer space and under water, could be carried out without being de-

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<sup>142</sup> CCD/PV. 619, 7 Aug. 1973, pp. 12-13.

tested, but were considered, if they ever took place, to be too insignificant to have any effect on the military balance between the United States and the Soviet Union.<sup>143</sup> Why is it not possible, now that only extremely minor tests underground may escape detection, to achieve a comprehensive ban with regard to underground testing? What considerable advantage may accrue to one of the protagonists or the other if an undetected one or two-kiloton explosion is carried out underground? Is not the risk of detection a considerable deterrent against such a violation? Are not the risks of cheating much less than the risks of continued and vigorous unlimited testing, quantitatively and qualitatively?

A group of experts in 1977 suggested that the solution of the question of verification might be possible by using the verification formula of the SALT I agreements: agreed verification by national technical means, non-interference with such means, and the obligation not to undertake concealment measures. Moreover, the establishment of a similar organ to the Standing Consultative Commission would be helpful in guaranteeing the proper implementation of an underground test-ban treaty.<sup>144</sup>

(ii) The Threshold Test Ban Treaty

The signing of the Threshold Test Ban Treaty at Moscow on 3 July 1974, which at the end of 1979 had not yet entered into force, triggered new directions towards the complete cessation of nuclear-weapon testing. The Treaty's main provisions prescribe the following:<sup>145</sup>

- A five-year renewable ban on all underground tests exceeding a yield of 150 kilotons, which was supposed to begin on

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<sup>143</sup> See Hearings on Test Ban, pp. 106, 112 and 241.

<sup>144</sup> "Non-Proliferation: What Progress," Discussion Group Report in Thirteenth Strategy for Peace Conference Report (Warrenton, Virginia: Arlie House, 12-15 Oct. 1972), p. 27.

<sup>145</sup> The Text of the Treaty and its Protocol are reproduced in Appendix 14.

31 March 1976 had the Treaty been ratified and entered into force. The Parties to the Treaty have stated, however, that they would observe the limitation during the pre-ratification period.<sup>146</sup>

- A commitment to limit such underground testing to a minimum and to continue their negotiations for a cessation of all nuclear-weapon tests.

- Verification will be by national means only, including mutual consultation and the furnishing of information upon inquiry. In the attached Protocol to the Treaty, the Parties agree to the reciprocal exchange of specific data pertinent to the location of the test sites and to the nature of the tests themselves.

- The Treaty does not extend to underground nuclear explosions carried out by the Parties for peaceful purposes outside the tests sites specified for weapons testing. Peaceful nuclear explosions carried out by the United States and the Soviet Union are the subject matter of the 1976 PNE Treaty, which has already been dealt with in Chapter 7. The two Treaties, are very much interrelated in several respects. For example, the PNE Treaty prescribes that under no circumstances shall either Party be entitled to terminate the Treaty while the Threshold Test Ban Treaty remains in force. The termination of the latter would entitle, however, either Party to withdraw from the PNE Treaty. Moreover, both Treaties prohibit any individual explosion having a yield exceeding 150 kilotons. They basically differ, however, with respect to verification. Apart from prescribing the use of national technical means, the PNE Treaty also allows each Party access to the sites of explosions of the other Party in accordance with the provisions set forth in the Protocol to the Treaty.

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<sup>146</sup> It was reported that during 1978, at least three underground tests carried out by the Soviet Union were well above the 150-kiloton limit. See Rowland Evans and Robert Novak, "Violations of the Test Ban?", The Washington Post, 5 Sept. 1979.

In the United States, the two Treaties were submitted together to the U.S. Senate for ratification in the summer of 1976. The Senate Committee on Foreign Relations began hearings on both only in July 1977.<sup>147</sup> The delay in submitting them for congressional consideration as well as the delay in securing their ratification so far is due to the amount of criticism the Treaties had generated, especially among arms control advocates.

On one hand, the limit of 150 kilotons was found to be about ten times higher than any previous suggestions, earlier referred to. As far as 1966, the United States itself considered proposing a 20-kiloton threshold test ban at the Disarmament Conference in Geneva.<sup>148</sup> Even the 4.75 seismic magnitude on the Richter scale beyond which tests could be detected and identified corresponds roughly to 15 kiloton explosion in hard rock. Moreover, the majority of Soviet and US explosions examined over a period of years had been well below the 150 kiloton limit. The limit was found to be ten times larger than the explosive power of the Hiroshima bomb.<sup>149</sup> As put by Senator Edward Kennedy, the agreement "seems to have been drafted by arms developers rather than arms controllers."<sup>150</sup>

On the other hand, the access to the sites of explosions provided for by the PNE Treaty, although hailed as a breakthrough in the field of verification and a precedent that could be followed in a future comprehensive test ban was found to be quite different from the concept of on-site inspection. It was argued that in the case of the PNE Treaty,

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147 See Hearings on Threshold Test Ban, *op. cit.*

148 See Robert Helm and Donald Westervelt, "The New Test Ban Treaties: What Do They Mean? Where Do They Lead?", International Security, Vol. 1, No. 3, Winter 1977, pp. 170-171.

149 Alva Myrdal, The Game of Disarmament. How the United States and Russia Run the Arms Race (New York: Pantheon Books, 1976), pp. 209-210.

150 Press release from the office of Senator Kennedy quoted in Ibid., p. 210.



the time and locations of the observation will be completely under the control of the host country, and therefore of doubtful value for a comprehensive test-ban.<sup>151</sup>

The first reactions to the Threshold Treaty at the CCD and later at the 29th session of the UN General Assembly in 1974, although generally favourable, were critical of the level of tests exempted from the ban as being unduly high. It was suggested to the two Parties to lower the threshold. Moreover, it was believed that the rather late effective date of the Treaty would encourage an all-out race to test before the deadline. It was quite significant that no reference was made to the Threshold Treaty in the resolution adopted by the General Assembly on the cessation of nuclear tests that year, which reflected the great feeling of indifference of UN Member States to this modest step.<sup>152</sup>

The Threshold Test Ban Treaty implies, in fact, that the super-Powers have not yet decided to give up their qualitative nuclear arms race. The example of the Partial Test-Ban Treaty of 1963 which was followed by vigorous underground testing should have been a lesson not to be forgotten. The data compiled by SIPRI in its Yearbook of 1979 indicates, for example, that the number of underground nuclear explosions carried out by the Soviet Union in 1978 was 27 as opposed to 19 in 1974.<sup>153</sup>

### (iii) The Test Ban and the 1975 NPT Review Conference

The post Threshold Treaty period has been marked by a clear emphasis on reaching an agreement on a comprehensive test ban as a matter of urgency, rather than the so-called half solutions.

At the end of the general debate at the NPT Review Conference, Mrs. Enorsson, summed up the position of the non-nuclear-weapon States on this issue, saying that the agreement on a

<sup>151</sup> Helm and Westervelt, loc. cit., p. 174-176 and Thomas A. Halsted, "Why No End to Nuclear Testing?", Survival, Vol. XIX, No. 2, Mar./Apr. 1977, pp. 63-64.

<sup>152</sup> For more details, see Doc. NPT/CONF/8, 24 Feb. 1975, paras. 43-47.

<sup>153</sup> SIPRI Yearbook, 1979, p. 655.

comprehensive test ban was clearly recognized as the most decisive element in the efforts towards genuine nuclear disarmament.<sup>154</sup> A group of 20 non-nuclear-weapon States, led by Mexico, proposed an Additional Protocol I to be attached to the NPT, as was the case with Additional Protocols II earlier referred to in this chapter, whereby the three Depositary Governments of the NPT would undertake the following:

- The suspension of all their underground nuclear weapon tests for a period of ten years, as soon as the number of Parties to the NPT reaches one hundred.
- The extension of three years the moratorium contemplated, each time that five additional States become Parties to the NPT.
- The transformation of the moratorium into a permanent cessation of all nuclear-weapon tests, through the conclusion of a multilateral treaty for that purpose, as soon as the other nuclear-weapon States indicate their willingness to become parties to the Treaty.

The Protocol would be of the same duration as the NPT. It would be subject to ratification by the three Depositary Governments and enter into force when ratified by two of them.<sup>155</sup>

Moreover, Sweden proposed that the nuclear-weapon States enter into immediate negotiations directed towards the conclusion of a treaty banning all underground nuclear-weapon test explosions for all time as an important measure to halt the nuclear arms race. It further proposed, as an interim measure, an agreement to halt, for a specified time, all underground nuclear-weapons tests.<sup>156</sup>

As earlier mentioned in this chapter with regard to Additional Protocol II on SALT, also proposed by Mexico and others,

154 Doc. NPT/CONF/26, 26 May 1975 (The statement was made on 12 May 1975).

155 Doc. NPT/CONF/L.2/Rev.1 in Doc. NPT/CONF/35/I, Ann. II, pp. 2-4.

156 Doc. NPT/CONF/C.I/8, 20 May 1975 in Doc. NPT/CONF/35/II.

the test ban proposals were rejected by the nuclear-weapon States mainly on the basis that they were beyond the terms of reference of the Review Conference and that a Comprehensive Test Ban raised technically complex and serious issues which could not be resolved according to arbitrary timetables and artificial deadlines. Mexico unsuccessfully offered to change Additional Protocol I so as to stipulate that several non-nuclear-weapon States near the nuclear Threshold be among the additional adherents required before the test moratorium could come into force.<sup>157</sup>

Given the impasse, the Conference in its Final Declaration reached the following compromise formula worked out by its President:

"The Conference affirms the determination expressed in the preamble to the 1963 Partial Test Ban Treaty and reiterated in the preamble to the Non-Proliferation Treaty to achieve the discontinuance of all test explosions of nuclear weapons for all time. The Conference expresses the view that the conclusion of a treaty banning all nuclear weapons tests is one of the most important measures to halt the nuclear arms race. It expresses the hope that the nuclear-weapon States Party to the Treaty will take the lead in reaching an early solution of the technical and political difficulties on this issue. It appeals to these States to make every effort to reach agreement on the conclusion of an effective comprehensive test ban. To this end, the desire was expressed by a considerable number of delegations at the Conference that the nuclear-weapon States Party to the Treaty should as soon as possible enter into an agreement, open to all States and containing appropriate provisions to ensure its effectiveness, to halt all nuclear weapons tests of adhering States for a specified time, whereupon the terms of such an agreement would be reviewed in the light of the opportunity, at that time, to achieve a universal and permanent cessation of all nuclear weapons tests. The Conference calls upon the nuclear-weapon States signatories of the Treaty on the Limitation of Underground Nuclear Weapons tests, meanwhile, to limit the number of their underground nuclear

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<sup>157</sup> Postures for Non-Proliferation, p. 137.

weapons tests to a minimum. The Conference believes that such steps would constitute an incentive of particular value to negotiations for the conclusion of a treaty banning all nuclear weapons test explosions for all time."<sup>158</sup>

Ambassador Garcia Robles of Mexico explained that the consensus reached on the Final Declaration with respect to arms limitation and disarmament, including the test-ban issue, was agreed to by the sponsors of Protocols I and II as well as Protocol III on security assurances on the understanding that the draft resolutions recommending them would all be annexed to the Final Declaration.<sup>159</sup>

(iv) Towards a Comprehensive Test Ban Treaty

Since the Conference and through 1979, both the UN General Assembly, the CCD, its successor the CD and the re-established DC devoted great attention to the issue of the nuclear test ban. The latter forum has put it at the very top of the list of the elements of a comprehensive programme for disarmament it has worked out in response to a request from the Tenth Special Session of the UN General Assembly devoted to disarmament.<sup>160</sup> During this period of more than five years the following significant trends and developments could be summarized as follows:<sup>161</sup>

- A comprehensive test ban treaty was looked upon as having a major role, if not the first step and the necessary prerequisite towards the prevention of the further development of nuclear weapons and their proliferation. This trend was crystallized in the Final Document of the Tenth Special Session of the UN General Assembly. The latter stated that the cessation of nuclear-weapon testing by all States within the framework of an effective nuclear disarmament process would be in the

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<sup>158</sup> See Appendix 17, Ann. I, p. 8.

<sup>159</sup> They are all reproduced in Ibid., Ann. II, pp. 1-11.

<sup>160</sup> Report of the Disarmament Commission. GAOR, 34th Sess. (1979), Suppl. No. 42 (A/34/42), p. 11.

<sup>161</sup> For a yearly account of the developments from 1975 to 1979, upon which the following analysis is mainly based, see Doc. NPT/CONF.II/PC.II/2, 1 Aug. 1979.

interest of mankind, and that it would make a significant contribution to the aim of ending the qualitative improvement of nuclear weapons and the development of new types of such weapons and of preventing the proliferation of nuclear weapons.<sup>162</sup>

- Taking into account that a treaty may take a long time to negotiate, and in view of the frustration generally felt among the non-nuclear-weapon States because of the lack of real progress in the ongoing negotiations, the idea of a test ban moratorium resurged forcefully, as an interim measure. Nuclear-weapon States were called upon to suspend testing for a limited period.

India took the lead at the Tenth Special Session of the UN General Assembly in 1978 in calling upon all nuclear-weapon Powers to refrain from further testing of nuclear weapons and had presented a draft resolution on that issue. India, however, did not press for a vote hoping that at the 33rd regular session the nuclear-weapon States would respond positively to its view. The last sentence of paragraph 51 of the Final Document emanating from the Special Session was drafted in a way as to reflect the Indian idea of a moratorium as well as the different views expressed by some nuclear-weapon States.<sup>163</sup> As no progress had been achieved by the time the 33rd session of the Assembly had convened, India tried once more, this time with success, to secure a resolution calling upon all States, in particular all nuclear-weapon States, pending the conclusion of a comprehensive test ban treaty, to refrain from testing.

The resolution was opposed by China and France. The first wished to reserve its position in respect of all references advocating or calling for a complete nuclear test ban. France reiterated the reservations it had expressed on the occasion of the adoption of the Final Document of the Special Session

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<sup>162</sup> See Appendix 22, para. 51.

<sup>163</sup> Ibid.

to the effect that it was not in agreement with the idea that the cessation of nuclear tests would make a significant contribution to the aim of preventing the production of new types of weapons and of preventing the proliferation of nuclear weapons.

The United Kingdom and the United States abstained in the vote on the Indian resolution. The United States reiterated its views expressed at the Special Session that a comprehensive test ban, in order to promote stability and mutual confidence among its participants, must be based on adequate measures of verification. An immediate cessation of nuclear testing could, in its view, seriously complicate the efforts of elaborating measures of verification under way in the ongoing negotiations.

The Soviet Union had no difficulty in supporting the Indian resolution. In November 1977, President Brezhnev made a statement in Moscow to the effect that the Soviet Union was prepared to accept a suspension of all underground nuclear tests for a definite period of time.

In 1979, India tried once more to secure a similar resolution by the 34th session of the UN General Assembly, but had been dissuaded by New Zealand, which wanted to give a chance of success to its own draft resolution, which eventually was adopted by the Assembly and which, inter alia, requested the CD to initiate negotiations on a test ban treaty, as a matter of the highest priority. The resolution also called upon the USSR, the UK and the United States to bring their negotiations to a positive conclusion.<sup>164</sup> This brings us to the following point.

- In June 1977, the Soviet Union and the United States had held bilateral consultations on the issue of a test ban. They were joined in early July of that year by the United Kingdom. The trilateral talks had been shrouded in secrecy as the case had been with the negotiations on SALT I and II Agreements.

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<sup>164</sup> UN Doc. A/RES/34/73, 26 Dec. 1979.

They seem to have achieved some progress, as can be deduced from the various statements made by the participants.

The secrecy of the talks and the meagre information available from the participants on the progress achieved had led the Special Session of the UN General Assembly in 1978 to urge the submission of the results of the ongoing negotiations for full consideration by the multilateral negotiating body, i.e., the CCD, with a view to the submission of a draft treaty to the UN General Assembly.<sup>165</sup> Such an appeal was reiterated by the following 33rd regular session of the Assembly. In fact, the General Assembly in 1976 had called upon all nuclear-weapon States to proceed with the conclusion of a test ban treaty with the participation of the non-nuclear-weapon States. In the year before, the Soviet Union on the occasion of its submission to the General Assembly of a draft test-ban treaty had invited 25 to 30 non-nuclear weapon States to participate in negotiating it.

The most candid remarks on the issue of participation in the test ban negotiations were made by the UN Secretary General in his message to the 1979 opening session of the newly established CD. He noted that while negotiations with limited participation could be useful for formulating texts which could serve as the basis for further consideration in the CD, they could cause a sense of frustration when they failed to produce results even after a reasonable period of time. He thought that there could, at least, be a regular system of reporting which would provide the membership with concrete information in areas of agreement and divergence. The CD's views could thus be taken into account by the parties in the negotiations.

- In spite of the lack of a regular system of reporting, it is quite possible to discern the basic elements of an eventual test ban treaty from the various statements and documents made available by the participants to the trilateral talks. Their

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<sup>165</sup> Appendix 22, para. 51.

respective attitudes in the debates taking place at the CCD and now at the CD on certain aspects of a test ban treaty are also quite revealing.

The emphasis, as repeatedly pointed out, is on an international treaty comprehensively banning test explosions of nuclear weapons in any environment. To what extent the aforementioned Soviet draft treaty submitted to the UN General Assembly in 1975,<sup>166</sup> and an amendment brought to it by the Soviet Union before the General Assembly in 1977,<sup>167</sup> have influenced the course of the trilateral negotiations cannot be completely ascertained. The fate of a draft treaty introduced by Sweden to the CCD in 1977 providing for possible transitional arrangements to permit the phasing out of testing over a limited period of time is also not known.<sup>168</sup>

The Treaty would be of unlimited duration. It would be open for the adherence of all States. The Soviet Union has softened its position as to the necessity of adherence of all nuclear-weapon States to the treaty in conformity with the principle of equal security of all States. In response to the appeals of numerous non-nuclear-weapon States, the Soviet Union revealed in 1977 that under an agreement with the United States and the United Kingdom it would consent to suspend underground nuclear-weapon tests for a period of time, even before the adherence of other nuclear-weapon States, i.e., China and France.

On the key issue of verification, the basic positions of the Soviet Union and the United States had remained unchanged. The Soviet Union and its allies, as well as Sweden maintained that national means of verification, combined with international co-operation in the exchange of seismic data, could ensure effective control of any agreement. The United States and the United Kingdom, on the other hand, continued to insist

166 For the text of the Soviet draft, see US ACDA, Documents on Disarmament, 1975 (Pub. No. 93, June 1977) (Washington, D.C.: US GPO, 1977), pp. 487-490.

167 Documents on Disarmament, 1977, pp. 794-795.

168 CCD/526, and Rev.1 in Ibid., pp. 112-115 and 402-405.



on the need for on-site inspection to ensure against any tests which, though too small to be identified, might be of military significance.

However, at the 31st session of the UN General Assembly, the Minister of Foreign Affairs of the Soviet Union, Mr. Andrei Gromyko, in a letter to the UN Secretary General on ending the arms race and on disarmament, indicated that the Soviet Union saw no particular difficulties in elaborating a compromise basis for a test ban agreement that would ensure a voluntary framework for taking decisions relating to on-site ascertaining of relevant circumstances.<sup>169</sup> It was later stated by the Soviet Union that a reliable verification system, as agreed to in the Threshold Treaty and the PNE Treaty, could be used to solve similar problems with regard to a general and complete test ban. Moreover, the amendment brought by the Soviet Union to its own text of a draft treaty in 1977, referred to above, provided for on-site inspection under certain conditions on the voluntary invitation of the State being inspected.<sup>170</sup>

During the 1976 session of the CCD, on the initiative of Sweden a decision then was taken to establish an "Ad hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events." The Ad hoc Group is open to all Member States of the CD as well as the States not members of the Committee. The World Meteorological Organization (WMO) was invited to participate in its work. So far the Group had made encouraging progress towards the establishment of a network of seismological stations for the international exchange of seismological data under a test ban treaty. The parties to the trilateral talks shared the view that such an exchange would play a major role in verification of compliance with the treaty. They also agreed that the guidelines for setting up and running the international seismic exchanges should be laid down in an annex to the treaty,

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169 UN Docs. A/31/232 and A/C.1/31/PV.41 in Doc. NPT/CONF.II/PC.II/2, 1 Aug. 1979, para. 19.

170 CCD/523 in Ibid., para. 23.

and that detailed organizational and procedural arrangements should be worked out after the entry into force of the treaty.<sup>171</sup>

Lastly, on the link between a comprehensive test ban treaty and peaceful nuclear explosions, the three parties to the tri-lateral talks were anticipating a protocol covering peaceful nuclear explosions, which would be an integral part of the treaty. They most probably had before them the draft test-ban treaty proposed by Sweden, which provided special arrangements for the carrying out, under international supervision, of peaceful nuclear explosions of overriding national and international importance. Sweden was the first to propose the working out of such arrangements in a separate protocol. The idea of a protocol is certainly a gain to the position of the Soviet Union, which held the view that a nuclear-weapon test ban should not create obstacles in the way of PNEs, whereas the United States favoured a complete prohibition of the latter as well.

With the completion of SALT II Agreements, expectations were high that a comprehensive test-ban Treaty is on the verge of completion, it being the logical next step. The communiqué of 18 June 1979 issued at Vienna at the end of the US/Soviet Summit, stating that there had been definite progress at the test ban negotiations had engendered such optimism. However, both SALT II and a comprehensive test ban treaty have receded in the new atmosphere of tension that has been created as a result of a combination of factors, foremost among them is the Soviet military intervention in Afghanistan.

Apart from the changing atmosphere, it appears to us that the solution of the question of underground testing would still depend in the future on the political will of the two super-Powers to forego the qualitative vertical proliferation. A comprehensive test ban would not only be a parallel non-proliferation measure to the NPT but would also readjust

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<sup>171</sup> The United Nations Disarmament Yearbook, 1978, p. 203.

the deficit in the balance sheet so far unfavourable to the two super-Powers with respect to their obligations under Article VI of the NPT.

(c) Cessation of the Production of Fissile Materials for Weapons Purposes

A cessation, or the so-called "cutoff" of the production of fissile materials for weapons purposes would be a significant step towards the complete stoppage of the production of nuclear weapons, i.e., a halt to the quantitative nuclear arms race. We also need not repeat here the aforementioned proposals and suggestions, put forward by India, Italy, Sweden and others, for linking such a measure to the NPT.

Ever since the United States and the Soviet Union announced on 20 April 1964 unilateral decisions to reduce the production of fissile materials for weapons purposes, no other similar unilateral decision or agreement on a complete cutoff has been reached. The unilateral decisions of 1964 represented for the United States an over-all decrease of 20 per cent in the production of plutonium and 40 per cent in the output of enriched uranium. As to the Soviet Union, it announced decisions to stop forthwith the construction of two new large atomic reactors for the production of plutonium, to reduce substantially during the following few years the production of uranium-235 for nuclear weapons and to allocate more fissionable materials for peaceful purposes. The United Kingdom explained that it had pursued a policy along the same lines, noting that it had earlier announced that the production of uranium-235 had ceased and that that of plutonium was gradually ending.<sup>172</sup>

In the period of the formulation of the NPT and, more precisely, in the period running from 1964 through 1968, the cut-off of production of fissile materials received some attention on the part of the United States and the Soviet Union. As in the case of a comprehensive test ban, verification was a stumbling block for reaching agreement. The United States pro-

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172 The United Nations and Disarmament: 1945-1970, p. 161.

posed an elaborate system of on-site inspection of uranium-235 separation plants, nuclear reactors which produced fissionable material and chemical separation plants. The Soviet Union contended that the US proposal amounted to control without disarmament, and criticised its inspection system, which would not only disclose the volume of production of military fissile materials but also the volume of existing stocks, their sources and complete technology of production of materials on which a nation's security was based. The Soviet Union even doubted whether an agreement on cutoff was possible outside of general disarmament.<sup>173</sup>

In the period after the NPT was opened for signature, and more precisely in 1969, the United States again stressed the urgency of the question and suggested that the cessation of production be safeguarded by the IAEA rather than by "adversary inspection." The US maintained that such verification would apply the same system to nuclear-weapon States as that applied to non-nuclear-weapon States under the NPT and that an agreement on the cessation of production would constitute an important measure towards the ending of the nuclear arms race, pursuant to Article VI of the NPT. The Soviet Union repeated its argument that such measures did not contribute to the reduction of existing nuclear arsenals and noted the possibility that some nuclear Powers might fail to agree to it.<sup>174</sup>

The Soviet Union's position on this issue was consistent with its own stand on refusing categorically any mandatory on-site inspection on its own territory. Moreover, the Soviet Union has become very sensitive to the Chinese nuclear-weapon programme, which as of 1964 counts increasingly in Soviet calculations on matters pertaining to arms control and disarmament. It is sufficient to refer to the previously-mentioned Soviet

173 Ibid., pp. 161-162. For a thorough analysis of the United States' proposal and the verification problems it raised, see David W. Wainhouse in association with others. Arms Control Agreements. Designs for Verification and Organization (Baltimore, Maryland: The Johns Hopkins Press, 1968), Chapter 1, pp. 11-42.

174 The United Nations and Disarmament: 1945-1970, p. 162.

attitude on the necessity of the participation of China in the negotiations and conclusion of a comprehensive test ban.

The cutoff issue as a separate issue in disarmament negotiations remained dormant for some time. Issues of a more global nature such as SALT and test ban took the lead.

In 1978, in anticipation of the UN General Assembly's Tenth Special Session devoted to disarmament, it was reported that the US Arms Control and Disarmament Agency worked out a proposal calling for an international ban on the production of fissionable material for nuclear weapons. The State Department sought Presidential approval so that the plan can be unveiled at the Special Session. In the letter addressed to the White House by Secretary of State Cyrus Vance, it was pointed out that the cutoff would serve the primary requirement of halting the proliferation of nuclear weapons and would also be consistent with other disarmament initiatives. It was further pointed out that the proposal directly addressed concerns expressed by India and hence would improve prospects for India's acceptance of international inspection of its nuclear facilities. It was also suggested that the IAEA could be assigned the task of verifying the cutoff.<sup>175</sup>

The proposal did not meet with the approval of the US Department of Defense. It was reported that the Secretary of Defense Harold Brown argued that the idea of a cutoff was no longer relevant in the present era of "strategic equivalence," and that if the US failed to achieve a new SALT agreement, it might then have an increased requirement for new nuclear materials. Moreover, it was argued that the problems of policing a nuclear production ban would be "overwhelming."<sup>176</sup>

As a result of US inter-agencies disagreement on the course to follow on this issue, no US plan had been submitted to the Special Session of the General Assembly. In its Final Document, the Assembly merely stated that the achievement of

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<sup>175</sup> The New York Times, 3 Apr. 1978.

<sup>176</sup> Ibid.

nuclear disarmament would require, inter alia, the cessation of the production of fissionable material for weapon purposes.<sup>177</sup>

At the 33rd session, it was Canada with the support of a few countries that initiated a draft resolution on the issue. Canada held the view that the merits of cutoff would be significantly enhanced if it were to be pursued in a multilateral treaty to which both non-nuclear weapon States and nuclear-weapon States might adhere, for such a measure would have the advantage of focusing, in the same statement, on both the vertical and horizontal dimensions of the problem. In such a treaty the IAEA would be entrusted with the task of the application of full-scope safeguards.<sup>178</sup>

The Canadian views were very much in line with the aborted US proposal. They were objected to by a number of countries, especially by the Soviet Union and, to the surprise of the United States, by India. Both the Soviet Union and India contended that the cutoff could not be divorced from the cessation of the production of nuclear weapons. They noted that link between the two was already established in the Final Document of the Special Session of the UN General Assembly.<sup>179</sup>

The draft resolution was adopted by the 33rd session of the Assembly by a wide majority. The Soviet Union and its allies voted against and few countries including Egypt, France and India abstained. The resolution merely requested the CD to consider urgently an adequately verified cutoff.<sup>180</sup> The request was reiterated by the 34th Session of the UN General Assembly in 1979.<sup>181</sup>

To conclude, the achievement of a cutoff would be the most

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177 See Appendix 22, para. 50.

178 The United Nations Disarmament Yearbook, 1978, p. 176.

179 Ibid., p. 177.

180 Ibid., pp. 177-178.

181 UN Doc. A/RES/34/87D, 17 Jan. 1980.

tangible step towards the creation of an atmosphere conducive to nuclear disarmament.

## 2. Nuclear Disarmament

A number of measures discussed in this chapter and elsewhere in this study, such as the non-use of nuclear weapons and the establishment of nuclear-weapon-free zones, are usually referred to and considered in the disarmament jargon as measures relating to cessation of the nuclear arms race and nuclear disarmament. What we are concerned with here is obviously real nuclear disarmament.

No measure of real nuclear disarmament has been achieved. It is true that some weapons become obsolete and are therefore shelved, but they are replaced by new and more powerful weapons. The SALT I and II agreements, for example, contain workable provisions for the renovation and replacement of weapons. The reduction of the production of fissile materials for weapons purposes also does not mean the reduction of existing weapons or even a halt to their production.

The history of the disarmament negotiations is heavily loaded with proposals and counter proposals on measures of nuclear disarmament concerning nuclear weapons and/or their delivery vehicles. Such proposals were either submitted as separate measures or as part of general schemes on general disarmament. However, nuclear disarmament as prescribed in Article VI of the NPT is not conditional upon its inclusion within the framework of a GCD treaty.

After the NPT was opened for signature in 1968, the most significant proposals which were made in this respect were Soviet proposals. For example, the Soviet memorandum, dated 1 July 1968,<sup>182</sup> on some urgent measures for stopping the arms race, contained an item entitled "Measures for stopping the manufacture of nuclear weapons and for reducing and destroying stockpiles." More significant was a proposal made by the Soviet Government in June 1971 for the convening as early as possible of a conference of the five nuclear-weapon Powers to consider

<sup>182</sup> See note 27 above.

questions of nuclear disarmament as a whole.<sup>183</sup> Here too we find a certain Soviet preoccupation with the nuclear status of China, which in the Soviet view has to be brought to the disarmament conference table if any meaningful agreement can be achieved.

The need for real nuclear disarmament was more particularly stressed in the preambular part of the Final Declaration of the NPT Review Conference of 1975 as well as in the Final Document of the UN General Assembly's Tenth Special Session in 1978, which had before it a number of proposals in this respect. At the CD in 1979, the Soviet Union and its allies renewed their drive towards the cessation of the production, reduction and complete destruction of nuclear weapons, to be carried out by stages on a mutually acceptable and agreed basis. Their proposal foresees the holding of negotiations with the participation of all nuclear-weapon States as well as of a certain number of non-nuclear-weapon States. The CD is mentioned, in the proposal, as a suitable forum for such negotiations. The Soviet Union and its allies pursued the matter at the 34th session of the UN General Assembly to give directions to the CD to initiate as a matter of high priority, such negotiations with the participation of all nuclear-weapon States.<sup>184</sup>

The goal of nuclear disarmament is not pursued by great and small Powers without recognising the danger of conventional weapons in a nuclear-disarmed world. But the vivid examples of Hiroshima and Nagasaki continue to stimulate and motivate countries to search for solutions. No matter how effective and stable the nuclear deterrent may appear to some, general confidence has never been placed in it. As well put by one country representative, "the real danger of the survival of mankind in organized society lies primarily in the existing

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183 GAOR, 26th Sess., Anns., a.i. 27, 28, 29, 30, 31, 32 and 98, Doc. A/8328, 25 June 1971.

184 For more details, see Doc. NPT/CONF.II/PC.II/5, 6 Aug. 1979, paras. 4, 18, 20 and 22; and UN Doc. A/RES/34/83 J, 17 Jan. 1980.



and still mushrooming arsenals of nuclear weapons and the means of delivery of such weapons."<sup>185</sup> However, in order to guard against the possibility of a nuclear disarmed world, but fully armed with conventional weapons, nuclear disarmament should be linked at a certain stage with the limitation and reduction of all conventional weapons. This brings us to the issue of general and complete disarmament. But as this goal is still far beyond reach, immediate and concrete measures of nuclear disarmament would not only alleviate the financial burden of the nuclear-weapon States but would also free resources urgently needed for the economic development of the non-nuclear-weapon States and, more particularly, the developing countries. It is in this spirit that proposals such as the "Fanfani proposal" on fissile materials and the Brazilian amendment to Article VI were introduced.<sup>186</sup>

### 3. A Treaty on General and Complete Disarmament under Strict and Effective International Control

Under the term general and complete disarmament, every single measure of arms control and disarmament can be included. Some UN publications list measures as varied as the prohibition of chemical and bacteriological (biological) weapons and the reduction of military budgets as measures relating to general and complete disarmament.<sup>187</sup> It is obviously beyond the scope of this study on nuclear non-proliferation to indulge in a review of the progress achieved on these issues. What we are

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185 ENDC/PV. 363, 8 Feb. 1968, para. 46 (Brazil).

186 For Brazil's amendment, see note 73 above. It is estimated that if 2000 tons of fissile material were released for peaceful purposes it would be enough to provide the initial and replacement fuel over their useful life for an installed capacity of about 100,000 electrical megawatts of thermal reactors or an installed capacity of about 500,000 electrical megawatts of fast breeder reactors. For comparison with these figures, the current estimates by the IAEA of the total installed capacity of nuclear power plants are 300,000 electrical megawatts in 1980 and 1,000,000 electrical megawatts in 1990. Disarmament and Development, para. 44(a).

187 See, for example, ibid., p. iii.

concerned with here is the specific issue of a treaty on general and complete disarmament.

In 1973, the representative of Mexico at the CCD summarised very well the situation as it stood then with regard to general and complete disarmament, by saying that the nuclear Powers appeared to have forgotten the goal of GCD which occasionally received from them the verbal tribute of a timid, incidental and hasty reference.<sup>188</sup>

In 1959 and the early 1960s, GCD dominated the debates on disarmament; but ever since disarmament negotiations concentrated on the partial and the so-called collateral measures, GCD has never regained its previous momentum. The two plans for GCD tabled by the two Super-Powers at the ENDC in 1962, and subsequently revised, have remained the same since 1964.<sup>189</sup>

There are no illusions held about the possibility of concluding a treaty on GCD in the near future. As bluntly put by Gerard Smith at the hearings held on the NPT by the US Senate Committee on Armed Services, "I do not think anybody has seriously thought this is a negotiable proposition in the modern world...it is an ideal...it is not the sort of program that I can envisage coming about in our lifetime."<sup>190</sup>

The virtue of the idea of general and complete disarmament is that it serves as an ideal which helps to preserve the momentum and vigour of the ongoing disarmament negotiations with a view to accomplishing less ambitious but more immediate goals. The following assessment made by a group of experts, with which we conclude this chapter, seems quite pertinent:

"The goals of international disarmament must constantly be kept alive in the minds of the people

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<sup>188</sup> CCD/418, 30 Aug. 1973, para. 120.

<sup>189</sup> For a detailed review of GCD proposals and discussions between 1959 and 1970, see United Nations and Disarmament: 1945-1970, pp. 78-125. For thorough analyses of GCD plans, see Allan Gotlieb, op. cit., especially Chapters 11, 12, 16 and appendices I and II; and Leonard Beaton, The Reform of Power. A Proposal for an International Security System (London: Chatto and Windus, 1972), Chapter 3, pp. 73-117.

<sup>190</sup> Hearings on Military Implications of NPT, p. 138.

of the world, with the hope they raise to avert war, to strengthen peace and security between nations and to foster a climate of co-operation for progress."191

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To sum up, Article VI of the NPT is not an aim in itself. It is a means to redress the balance of obligations and responsibilities of the nuclear and non-nuclear-weapon States Parties to the Treaty, and a step towards the achievement of disarmament and, more particularly, nuclear disarmament; provided that the nuclear-weapon States take seriously their obligation to negotiate meaningful agreements.

As the nuclear-weapon States are mainly held responsible for achieving further arms control and disarmament agreements, the nature of the measures prescribed, with the exception of GCD, pertain exclusively to the field of the nuclear armoury. In this field, Article VI, if linked with NPT provisions on review conferences and duration, can be said to have institutionalised a framework for continuous negotiations, which may last for 25 years, the initial duration period of the NPT.

The meagre results so far achieved are superficial rather than real. The SALT I and II Agreements allow the nuclear arms race to go on. More significant is that the agreements move the nuclear arms race qualitatively into new ventures. Failure to agree on a comprehensive test ban allows the super-Powers to continue this qualitative race, as much as their failure to agree on a cutoff of fissile materials for weapons purposes allows them to continue their quantitative arms race.

Cessation of the nuclear arms race, nuclear disarmament and general and complete disarmament have to be tackled with all the seriousness and imaginative vision that made previous agreements possible. If the super-Powers fail to reach further agreements, they run the risk of encountering a hostile attitude on the part of non-nuclear-weapon States which could lead to the abandonment of the NPT even by some previously avowed committed Parties.

191 Disarmament and Development, para. 46.

Two measures, at least, would bolster the viability of the NPT, i.e., a permanent agreement for a quantitative and a qualitative limitation and eventual reduction of strategic offensive nuclear weapons, and a comprehensive test ban agreement.

To conclude, it is quite comforting that ways and means have been found to renovate disarmament forums and transform them into credible places of negotiations, which would allow France and China to be associated more closely with the disarmament process. At a certain phase no meaningful agreements could be reached without their participation and close cooperation, if a balance, however precarious it might be, is to be maintained between the five nuclear-weapon Powers. In fact, the absence of both countries in the negotiations of the NPT and as Parties to it has been considerably felt. The renovation of disarmament machinery was one of the most concrete accomplishments of the UN General Assembly Special Session devoted to disarmament in 1978. The Special Session has generally contributed to the revitalization of serious efforts on a number of key issues related to nuclear non-proliferation, which are examined throughout this study.

## PART V

*"There should be acceptable and workable provisions to ensure the effectiveness of the treaty"*

(Principle (d))



## CHAPTER 10

### International Safeguards : Article III

#### Texts :

#### Preamble

Undertaking to co-operate in facilitating the application of International Atomic Energy Agency safeguards on peaceful nuclear activities,

Expressing their support for research, development and other efforts to further the application, within the framework of the International Atomic Energy Agency safeguards system, of the principle of safeguarding effectively the flow of source and special fissionable materials by use of instruments and other techniques at certain strategic points,

#### Article III

1. Each non-nuclear-weapon State Party to the Treaty undertakes to accept safeguards, as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency in accordance with the Statute of the International Atomic Energy Agency and the Agency's safeguards system, for the exclusive purpose of verification of the fulfilment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices. Procedures for the safeguards required by this article shall be followed with respect to source or special fissionable material whether it is being produced, processed or used in any principal nuclear facility or is outside any such facility. The safeguards required by this article shall be applied on all source or special fissionable material in all peaceful nuclear activities within the territory of such State, under its jurisdiction, or carried out under its control anywhere.

2. Each State Party to the Treaty undertakes not to provide :  
(a) source or special fissionable material, or (b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-

nuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by this article.

3. The safeguards required by this article shall be implemented in a manner designed to comply with article IV of this Treaty, and to avoid hampering the economic or technological development of the Parties or international co-operation in the field of peaceful nuclear activities, including the international exchange of nuclear material and equipment for the processing, use or production of nuclear material for peaceful purposes in accordance with the provisions of this article and the principle of safeguarding set forth in the Preamble of the Treaty.

4. Non-nuclear-weapon States Party to the Treaty shall conclude agreements with the International Atomic Energy Agency to meet the requirements of this article either individually or together with other States in accordance with the Statute of the International Atomic Energy Agency. Negotiation of such agreements shall commence within 180 days from the original entry into force of this Treaty. For States depositing their instruments of ratification or accession after the 180-day period, negotiation of such agreements shall commence not later than the date of such deposit. Such agreements shall enter into force not later than eighteen months after the date of initiation of negotiations.

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Until now we have assessed several aspects of the NPT and other measures related to it. However, if the Treaty is to be a worthwhile arms control measure, it remains to be shown in the first place how far it ensures in an effective way the compliance of the Parties to it with the basic obligations set forth in Articles I and II.

As previously demonstrated in Chapter 6, the peaceful uses of nuclear energy are developing and expanding rapidly in different parts of the world. Moreover, within the terms of Article IV of the NPT analysed in that chapter, international co-operation in the peaceful uses of nuclear energy is expected to increase and intensify.



By the end of 1978 the world's installed nuclear power capacity amounted to 110,000 megawatts, or six percent of the world's generating capacity. By 1985, on the basis of plants now being built, the share of nuclear power will increase to about 16 percent of the electricity actually produced.<sup>1</sup> Increasing prices of fossile fuel and the oil situation in general may render nuclear-power generation more competitive and hence accelerate its expansion to a higher figure by the turn of the century.

In practice, the increasing proliferation of peaceful nuclear activities means the production of more enriched uranium in the isotope U-235 as a fuel for nuclear-power plants and plutonium-239 as a spent fuel from these plants or other plants using natural uranium as a fuel.<sup>2</sup> As both materials, i.e., U-235 and Pu-239 are the two fissile materials currently used in the manufacture of nuclear weapons and other nuclear explosive devices, their control becomes essential if their diversion from peaceful to military purposes is to be checked.

Uranium enrichment is currently taking place only in the five nuclear-weapon States, and is so far being jointly developed by only three European States, i.e., the FRG, the Netherlands and the UK,<sup>3</sup> whereas plutonium production is widespread all over the world, wherever there is a nuclear-power plant or a nuclear-research reactor. As Pu-239 chemical separation from the spent fuel of a reactor has become a widely known technology and a financially feasible operation for many countries,<sup>4</sup> its control is the most immediate goal of any non-proliferation scheme. By 1980, the total annual production of plutonium is

1 IAEA Director Sigvard Eklund before the UN General Assembly. A/34/PV. 52 (prov.), 5 Nov. 1979, p. 7.

2 The quantity of plutonium produced from nuclear-power plants using natural uranium is almost double the quantity produced from plants using slightly enriched uranium (3% of U-235).

3 See Chapter 6.

4 For weapons-grade plutonium production costs, see Effects of the Possible Use of Nuclear Weapons, Ann. IV, Table 4,

expected to reach the figure of about 130 tons, one third of which would be produced in non-nuclear-weapon States. This would, in theory, correspond to the production of some 100 nuclear warheads of the Nagasaki-type bomb per week, each containing 8 kg. of 95% Pu-239 and yielding a 20-kiloton explosion.<sup>5</sup>

International control of peaceful nuclear activities is technically called international safeguards. It should be distinguished from other types of control whether in the field of disarmament and arms control, or in other fields such as opium control. It should also be distinguished from inspection, which is just one important component of an international safeguards system, as will be shown in the course of the analysis of Article III and its implementation.<sup>6</sup>

Safeguards should also be distinguished from physical protection aimed at preventing unauthorized interference with nuclear facilities or use of nuclear materials, such as theft, hijacking, terrorism and sabotage. It should also be distinguished from nuclear safety aimed at preventing accidents

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p. 57. For example, the production costs for 8 kg of weapons-grade plutonium per year would amount to 22 million dollars as capital costs and 4 million and 800.000 dollars as annual operating costs.

5 SIPRI Yearbook 1972, p. 288.

6 The word "safeguards" was used for the first time in the joint declaration of policy on the future development of atomic energy issued on 15 November 1945 by the Heads of Government of Canada, the United Kingdom and the United States, who met in Washington, D.C. in advance of the first session of the UN General Assembly, which was held in London in January 1946. The joint declaration proposed the establishment of a UN commission to study the problems of atomic energy and in particular to make specific proposals concerning, inter alia, effective safeguards by way of inspections and other means to protect complying States against the hazards of violations and evasions. See Allan D. McKnight, Atomic Safeguards. A Study in International Verification (New York : UNITAR, 1971), pp. 3-4, hereinafter cited as Atomic Safeguards.

or other unintended events causing material damage, loss of life or health hazards within nuclear installations or in their vicinity.

International safeguards have not always been assured. Safeguards have either been assured on a bilateral or a regional basis, or dispensed with altogether. However, increasing awareness of the dangers inherent in the spread of peaceful nuclear activities has sharpened the need for non-discriminatory and uniform international safeguards. Article III of the NPT has confirmed and strengthened the role of the IAEA in this respect, and is a considerable step in that direction. Its final formulation was not, however, easily accomplished.

The first text of an article on safeguards appeared in the first American draft treaty of 17 August 1965. Article III of that draft merely prescribed the co-operation of States Party to the treaty in facilitating the application of IAEA or equivalent international safeguards, a provision which virtually took into account the safeguards applied by the Euratom.<sup>7</sup> As explained by the US representative at the ENDC, the article did not set forth a precise or completely-formulated obligation; but it indicated a line of policy which all parties would undertake to implement.<sup>8</sup>

In contrast to the American text, the first Soviet draft treaty of 24 September 1965 included no provisions on safeguards.<sup>9</sup> That was due rather to a wait-and-see approach as to the nature and scope of safeguards than to a lack of interest in safeguards, which the Soviets have been supporting in the IAEA since 1964. Soviet interest in safeguards has reflected a de-escalation of political tensions already marked by the

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7 See Appendix 3-A.

8 ENDC/PV. 224, 17 Aug. 1965, p. 18.

9 See Appendix 3-B.

1963 Test-Ban Treaty and has been influenced by Chinese ascendancy to nuclear status in October 1964.<sup>10</sup>

Since the presentation of the 1965 American and Soviet drafts, reaching agreement on the formulation of Article III of the NPT was no less formidable than that reached on the formulation of Articles I and II, which had been lagging for some time because of the problem of nuclear-sharing arrangements within NATO.<sup>11</sup> The problem of instituting an international system of safeguards was likewise a European problem in the first place. As previously referred to in Chapters 3 and 6, the Euratom countries were insisting on preserving their own system of regional safeguards without any outside intrusion. As the United States had been showing signs of readiness to yield to Soviet and non-aligned pressure for the uniform application of IAEA safeguards, the Euratom countries had become more intransigent in their stand for the sole application of Euratom safeguards in their respective territories.

The first identical treaty drafts of 24 August 1967 failed to find a solution to that problem, the result of which was that Article III was left blank. The 1967 drafts included, however, the two NPT preambular paragraphs quoted at the outset of this chapter and which remained unchanged until the final formulation of the NPT. In contrast to Article III of the 1965 American draft treaty, the first preambular paragraph mentioned only the co-operation in facilitating the application of IAEA safeguards, which at that time was an indication of preference for a universal system of safeguards. In fact, an American working draft of an Article III circulated in February and March

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10 See Scheinman, "Nuclear Safeguards, the Peaceful Atom, and the IAEA", pp. 21-22 and George H. Quester, "The Nonproliferation Treaty and the International Atomic Energy Agency", International Organization, Vol. XXIV, No. 2, Spring 1970, p. 167.

11 See Chapters 4 and 5.

1967 among Euratom countries and other NATO and ENDC Members spoke only of IAEA safeguards.<sup>12</sup> The working draft also prescribed an obligation to apply safeguards in the non-nuclear-weapon States instead of the vague notion of co-operation in the 1965 American draft treaty.<sup>13</sup>

The failure to include the provisions of article III in the 24 August 1967 drafts prompted Sweden to propose a preliminary and tentative text of an article III.<sup>14</sup> Romania also proposed the replacement of the first preambular paragraph quoted above by a more detailed text.<sup>15</sup> Switzerland introduced five principles that a future article III should reflect.<sup>16</sup>

In order to appease the dissatisfaction of the non-nuclear-weapon States with the potential application of safeguards only in their own territories, both the United States and the United Kingdom pledged in December 1967 to apply IAEA safeguards on all their nuclear activities, excluding only those activities related to national security.<sup>17</sup>

On 18 January 1968, after lengthy and elaborate negotiations, the text of article III was finally introduced in the

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12 US Senator Pastore's draft of an article III submitted to the US Congress Joint Committee on Atomic Energy in 1966 allowed for "similar international safeguards". See Chapter 3, pp. 100-101 and Hearings on Nonproliferation of Nuclear Weapons, 1966, Appendix 12, pp. 147-148.

13 For a detailed discussion of article III circulated in 1967, see Steven Rosen, "Proliferation Treaty Controls and the IAEA", Journal of Conflict Resolution, Vol. XI, No. 2, June 1967, pp. 168-175.

14 DCOR, Suppl. for 1967 and 1968, Docs. 230 and Add. 1, Ann. IV, Sec. 11 (ENDC/195, 30 Aug. 1967) and ENDC/PV. 277, 31 Aug. 1967, paras. 21-27.

15 DCOR, Suppl. for 1967 and 1968, Docs. 230 and Add. 1, Ann. IV, Sec. 14 (ENDC/199, 19 Oct. 1967).

16 Ibid., Sec. 21 (ENDC/204, 24 Nov. 1967), para. 2.

17 Ibid., Sec. 23 (ENDC/206, 5 Dec. 1967 (US)) and Sec. 24 (ENDC/207, 5 Dec. 1967 (UK)).

second identical treaty drafts.<sup>18</sup> It was the result of a compromise, which took into consideration the preoccupations of the Euratom countries without giving up the principle of the universal application of IAEA safeguards.

In formulating Article III, the co-authors, i.e., the United States and the Soviet Union had, in fact, been guided by several principles. As these principles shed more light on the meaning and implications of Article III, it would be quite pertinent to cite them at the outset of this chapter. They are as follows :

"1. For all non-nuclear-weapon parties there should be safeguards of such a nature that all parties can have confidence in their effectiveness. Therefore safeguards established by an agreement negotiated and concluded with the IAEA in accordance with the Statute of the IAEA and the Agency's safeguards system must enable the IAEA to carry out its responsibility of providing assurance that no diversion is taking place.

2. In discharging their obligations under article III, non-nuclear-weapon parties may negotiate safeguards agreements with the IAEA individually or together with other parties; and, specifically, an agreement covering such obligations may be entered into between the IAEA and another international organization the work of which is related to the IAEA and the membership of which includes the parties concerned.

3. In order to avoid unnecessary duplication, the IAEA should make appropriate use of existing records and safeguards, provided that under such mutually-agreed arrangements IAEA can satisfy itself that nuclear material is not diverted to nuclear weapons or other nuclear explosive devices."<sup>19</sup>

Article III of the 18 January 1968 drafts remained unaltered until the final formulation of the NPT. Except for a number of amendments proposed by Romania at the ENDC,<sup>20</sup> no other amend-

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<sup>18</sup> See Chapter 3.

<sup>19</sup> ENDC/PV. 357, 18 Jan. 1968, para. 55 (US).

<sup>20</sup> DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 40 (ENDC/223/Rev. 1, 1 Mar. 1968).

ments to Article III were proposed whether at the ENDC or in the UN General Assembly.

Article III was just the beginning of an extensive and elaborate process towards its full implementation. Just over two months after the NPT was opened for signature on 1 July 1968, the Conference of Non-Nuclear-Weapon States, which was held in Geneva in August-September 1968, adopted two resolutions,<sup>21</sup> one of which recommended, inter alia, "the establishment, within the IAEA and under its Board, of institutional machinery on safeguards of which both countries supplying nuclear materials, as well as member countries whether possessing nuclear facilities or not, shall form part".<sup>22</sup>

Three weeks after the coming into force of the NPT on 5 March 1970, the Board of Governors of the IAEA decided to establish a Safeguards Committee to "advise the Board as a matter of urgency on the Agency's responsibilities in relation to safeguards in connection with the Treaty, and in particular on the content of the agreements which will be required in connection with the Treaty."<sup>23</sup>

The Safeguards Committee held three sessions in the period running from 12 June 1970 to 10 March 1971 in which more than 50 countries were represented, and at the end of which a model agreement on the structure and content of NPT safeguards agreements was agreed upon by consensus. The model agreement is known and referred to as the blue book.<sup>24</sup> It constitutes the

21 Final Document of the Conference of Non-Nuclear-Weapon States (A/CONF.35/10, 1 Oct. 1968), Resolutions E and F, pp. 9-11.

22 Ibid., Resolution F, operative paragraph 1, p. 11.

23 R. Rometsch, "Development of the IAEA Safeguards System for NPT" (A/CONF.45/P/770 : Invited review paper) in Peaceful Uses of Atomic Energy, Vol. 9, pp. 386-387.

24 The Structure and Content of Agreements Between the Agency and States Required in Connection With the Treaty on the Non-Proliferation of Nuclear Weapons (INFCIRC/153) (Vienna : IAEA, May 1971), hereinafter referred to as INFCIRC/153.

basis of the safeguards system applying to States adhering to the NPT, whereas the IAEA's safeguards system of 1965, as provisionally extended in 1966 and 1968, remains operational for States not adhering to the NPT.<sup>25</sup> We shall have ample opportunities to compare the two systems of safeguards in the course of our analysis of Article III and its implementation. The earlier system will be referred to in this chapter as the safeguards document.<sup>26</sup>

The review of Article III at the 1975 NPT Review Conference was an occasion to assess the effectiveness of the new system of safeguards and to introduce new ideas with a view of furthering the objective of safeguards and their universal application.

As of 1 August 1979, 76 non-nuclear-weapon States had concluded with the IAEA the required safeguards agreements. There were safeguards agreements in force with 64 of these States. The Agreements with the other 12 States which had been approved by the IAEA Board of Governors were awaiting entry into force.<sup>27</sup>

The IAEA is also responsible for the application of safeguards in the territories of States Parties to the Treaty of Tlatelolco.<sup>28</sup>

In the following parts of this chapter, we shall first deal with the parties to the application of safeguards required by Article III of the NPT. Secondly, the purpose and scope of NPT safeguards will be defined and identified, followed by an analysis of the obligations and rights of the Parties to the NPT and the safeguards agreements concluded in connexion

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25 IAEA Doc. INFCIRC/66/Rev. 2, 16 Sept. 1968.

26 For an excellent analysis of the Safeguards applied by the IAEA prior to the NPT, see Paul C. Szasz, op.cit., Chapter 21, pp. 531-657.

27 See Appendix 26C.

28 See Appendix 8, Article 13.



with it. On the basis of all this, the features, the procedures and the financing of NPT safeguards may be more clearly assessed. Finally, the last part is devoted to non-compliance with the safeguards prescribed, and its eventual implications.

### 1. The Parties to the Application of the Safeguards Required by Article III

The NPT is an international agreement concluded between individual States, directly responsible for its implementation. However, the Treaty contains several provisions implicating, in different degrees, international and regional organisations in its implementation. This is the case with respect to Articles IV and V treated in Chapters 6 and 7 respectively. It is also the case with respect to Article III in which the IAEA figures explicitly and prominently, whereas regional organisations such as Euratom are implied in the text of the Article. The Parties to the application of the safeguards required by Article III are, therefore, the States, the IAEA as the international organisation responsible for the administration of international safeguards and the regional organisations acting on behalf of their member States.

#### 1. The States

According to the general principle laid down in the preamble of the NPT, the States Party to the Treaty undertake "to co-operate in facilitating the application of International Atomic Energy Agency safeguards on peaceful nuclear activities". Each Party to the NPT, whether a nuclear or non-nuclear-weapon State, is in principle therefore expected to contribute in one way or another to the application of IAEA safeguards. However, States Party to the NPT are not, as can be deduced from the text of Article III, on equal footing in this respect. The discriminating nature of the NPT between nuclear and non-nuclear-weapon States is once more spelled out in this Article. Moreover, States not parties to the NPT may find themselves impli-

cated in the application of the safeguards required by Article III. In other words, third States may find themselves directly affected by a treaty they have chosen not to adhere to.

To be more specific yet without getting too much involved at this stage in a detailed analysis of the purpose and scope of the safeguards required by the NPT, and the obligations incumbent on the States Party to it, a distinction must be made here between nuclear and non-nuclear-weapon States as well as between States Party to the Treaty and States not party to it.

(a) Non-Nuclear-Weapon States Party to the NPT

Non-nuclear-weapon States have been subject to a multitude of forms of safeguards; bilateral, regional and international. The NPT aims at subjecting all these States to the application of uniform safeguards applied by the International Atomic Energy Agency.

Non-nuclear-weapon States Party to the NPT are involved in the implementation of all the provisions of Article III. During the negotiations of the Treaty, non-nuclear-weapon States in general had no difficulty in accepting the application of international safeguards on their peaceful nuclear activities. They resented, however, the idea of being discriminated against by the nuclear-weapon States Party to the Treaty. As far as the Members of Euratom were concerned, they resented also the idea of waiving their own regional safeguards system in favour of IAEA Safeguards.

(b) Non-Nuclear-Weapon States not Party to the NPT

By virtue of paragraph 2 of Article III, non-nuclear-weapon States not party to the NPT would have to accept international safeguards if they were to receive nuclear assistance from Parties to the NPT. This provision was unavoidable if non-nuclear-weapon States not party to the Treaty were not to be in a privileged position in international peaceful nuclear transactions vis-à-vis the non-nuclear-weapon States Party to the NPT. The application of international safeguards on such transactions

may encourage the non-nuclear-weapon States not party to the NPT to gradually submit all their peaceful nuclear activities to these safeguards.

At the Conference of Non-Nuclear-Weapon States, Pakistan succeeded in securing a resolution recommending "the acceptance of the IAEA system of safeguards, as may be evolved from time to time, by all the non-nuclear-weapon States, as set forth in an agreement to be negotiated and concluded with the IAEA in accordance with its safeguards system..."<sup>29</sup> (Emphasis added.) The representative of Pakistan explained that since the membership of IAEA did not carry with it the obligation to submit nuclear facilities to the Agency's safeguards system, the resolution was aimed at placing Members of the IAEA which had not signed the NPT on the same footing as signatories in respect of safeguards.<sup>30</sup>

The 1975 NPT Review Conference crystalized more clearly the recommendation of the Conference of Non-Nuclear-Weapon States. In its Final Declaration, the Review Conference urged that in all achievable ways, common export requirements relating to safeguards be strengthened, in particular by extending the application of safeguards to all peaceful nuclear activities in importing States not party to the NPT, the so-called full-scope safeguards. The Conference also urged that such common requirements be accorded the widest possible measures

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29 Final Document of the Conference of Non-Nuclear-Weapon States (A/CONF.35/10, 1 Oct. 1968), Resolution E, pp. 9-10. For the text of the draft resolution submitted by Pakistan and its explanation, see A/CONF.35/C.1/L.6, 18 Sept. 1968 and L.6/Rev. 1, 23 Sept. 1968; and A/CONF.35/C.1/SR. 13, 19 Sept. 1968, pp. 77-78 and SR. 17, 23 Sept. 1968, p. 109.

30 A/CONF.35/C.1/SR.13, 19 Sept. 1968, p. 77. The Pakistani move should be assessed in the light of Indian reticence with regard to the application of IAEA safeguards and its refusal to sign the NPT. On the Indian position, see Michael J. Sullivan III, "Indian Attitudes on International Atomic Energy Controls," Pacific Affairs, Vol. XLIII, No. 3, Fall 1970, pp. 353-369.

of acceptance among all suppliers and recipients, and that all Parties to the NPT should actively pursue their efforts to these ends.

The Board of Governors of the IAEA on its part adopted a draft resolution; submitted jointly by Canada, Denmark, the Netherlands, the USSR, the United Kingdom, the United States and Venezuela, in which it requested the Director General to prepare a document setting out the possible content of an agreement for the application of Agency safeguards to all nuclear activities in the State party to the agreement. The Agency's secretariat has prepared a draft for such a "full-scope agreement" but apparently no State has communicated the wish to conclude such an agreement. In this context, when the "Guidelines for Nuclear Transfers" established during meetings of the so-called "London's Nuclear Suppliers Club" were communicated to the IAEA on 11 January 1978, Czechoslovakia, the GDR, Poland and the USSR declared in separate letters their determination that their nuclear exports would go to a non-nuclear-weapon State only in case the whole nuclear activity of that State was subject to Agency safeguards. A couple of months later, on 10 March 1978, President Carter signed into law the Nuclear Non-Proliferation Act of 1978 which also requires the application of full-scope safeguards.<sup>31</sup> Those were individual decisions taken by the Members of the "London Club," who failed as a group to agree on a common position on the issue of full-scope safeguards.

A number of non-nuclear-weapon States not parties to the NPT have so far resisted with success the concept of full-scope safeguards. Argentina, Brazil and India are vivid examples in this respect. In the case of Argentina and Brazil, the United States has tried in vain to convince one of the Supplier countries, the FRG, not to go ahead with their respective projects without requiring full-scope safeguards.

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<sup>31</sup> See The United Nations Disarmament Yearbook, 1978, pp. 301-302. For the "Guidelines for Nuclear Transfers," and the Nuclear Non-Proliferation Act of 1978, see Appendices 19 and 21 (section 306) respectively.

In the case of India, the United States threatened to terminate supplies of low-enriched uranium for the Tarapur reactor unless India accepts full-scope safeguards. According to the Nuclear Non-Proliferation Act, the United States is prohibited 24 months after enactment of the bill, from exporting nuclear material to any State refusing the full-scope safeguards. However, the President of the United States has the authority to waive its application if he determines that failure to approve an export would be "(s)eriously prejudicial to the achievement of US non-proliferation objectives or otherwise jeopardize the common defense and security." Whether a waiver would be accorded to India or not, it is a matter to be seen when the 24 month deadline is reached around 10 March 1980. In view of India's nuclear-weapon potential and its explosion of a nuclear device in 1974, the resolution of this particular issue in one way or another would have a great impact on nuclear non-proliferation efforts.

(c) Nuclear-Weapon States Party to the NPT

These States are not under an obligation to submit their peaceful nuclear activities within their territories or under their jurisdiction to the safeguards required by Article III. They are bound, however, by virtue of paragraph 2 of Article III, not to provide source or special fissionable material or equipment or material especially designed or prepared for the processing, use or production of special fissionable material to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material are subject to the safeguards required by the Article. If the receiving State is a nuclear-weapon State, whether Party or not to the NPT, no safeguards are required.

The United States as a supplier of nuclear aid to many States used itself to administer safeguards in the receiving States. Since 1960 it has gradually transferred this responsibility to the IAEA. With respect to the Member States of Euratom,

the task of administering safeguards has been left to the Euratom Commission. The United Kingdom has followed the same policy as the United States in transferring the responsibility of safeguards to the IAEA. As to the Soviet Union, it has been less stringent in the application of safeguards and hence its safeguards' policy has varied according to the relationship it has entertained with the receiving States.<sup>32</sup> None of these three nuclear-weapon States Party to the NPT has been under the obligation to submit to safeguards unless required by a supplier State such as Canada, which from the mid 1960's has required appropriate safeguards to ensure, for example, that its exports of uranium are being used for peaceful purposes only.<sup>33</sup>

Under the general notion of co-operation in the American draft treaty of 17 August 1965, nuclear-weapon States might have come under international safeguards. The realisation, however, that the Soviet Union would not accept the application of international safeguards in its own territory, had prompted the Americans since early 1966 to favour the application of international safeguards on the peaceful nuclear activities of the non-nuclear-weapon States only. This constituted one main provision of the aforementioned Senator Pastore's formula for an article III. The other main provision in that formula would have had the effect of prohibiting each party to a non-proliferation treaty from providing, for example, source or special fissionable material to any State, whether a nuclear or non-

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32 In the Eastern-European countries where the Soviets enjoy a great political influence the spent fuel is sent back to the Soviet Union for reprocessing. In countries such as Yugoslavia and China, the uranium supplied by the Soviet Union is slightly enriched (only 2%). In third world countries, the presence of Soviet experts on the premises of the nuclear facilities is a sort of guarantee that no diversion is taking place. See Rosen, *loc.cit.*, p. 170.

33 See Sherman, Nuclear Proliferation, p. 77. See also the Canadian statement made at the ENDC on 12 Dec. 1967. ENDC/PV. 355, 12 Dec. 1967, para. 3.

nuclear-weapon State, without the application of international safeguards.<sup>34</sup>

On 28 July 1966, the United States' representative at the ENDC revealed for the first time his Government's thinking on the question of international safeguards in the context of a non-proliferation treaty. It was virtually a reflection of Senator Pastore's formula. The United States representative let it be understood that the recommended solution was a compromise between applying safeguards to the peaceful programmes of all States, which would have involved a tremendous strain on the safeguards system and would have been irrelevant for the nuclear-weapon States as long as they were free to increase their nuclear-weapon stockpiles, and applying safeguards to the nuclear peaceful activities of the non-nuclear-weapon States alone, which would have contained certain elements of partiality to which the latter would have objected.<sup>35</sup>

However, the American text of Article III which was circulated in February-March 1967 among Euratom countries and other NATO and ENDC Members was a further regression, since it exempted nuclear-weapon States from international safeguards on their imports, for example, of nuclear material.<sup>36</sup> This exemption, which was finally to take shape in the definite text of Article III, was apparently conceived to allow the nuclear-weapon States to import freely, for example, uranium from non-nuclear-weapon States such as South Africa without any outside infringement. It was also conceived to allow the continuation of the unrestricted co-operation in the peaceful uses of nuclear energy between the United States and the United Kingdom.

The discriminating nature of those early moves explains the

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34 Hearings on Nonproliferation of Nuclear Weapons, Appendix 12, pp. 147-148.

35 ENDC/PV. 277, 28 July 1966, pp. 4-7.

36 Sullivan III, loc.cit., pp. 365-366.

warnings and criticism voiced by a number of States before the introduction for the first time of Article III in the identical treaty drafts of 18 January 1968. The latter accentuated such warnings and criticism in spite of the voluntary offers made by the United States and the United Kingdom to submit their peaceful nuclear activities to international safeguards, offers that will be assessed further below.

Three main tendencies may be discerned from the attitudes of non-nuclear-weapon States with regard to the privileged position of the nuclear-weapon States. A small group of countries led by India and Brazil advocated the application of international safeguards on all the nuclear activities of the nuclear-weapon States (military and peaceful) as a means of checking the complete freeze on the production of nuclear weapons by these States. The attitude of this group of countries was consistent with their basic conception of the principle of balance of responsibilities and obligations of the nuclear and non-nuclear-weapon States.<sup>37</sup>

Another group of countries, while convinced of the merits of applying one measure to all States, realised at an early stage in the negotiations that the nuclear-weapon States would not accept to submit their nuclear activities to international safeguards. The preoccupation of these countries, therefore, was to secure an equal treatment for all non-nuclear-weapon States Party to the NPT.<sup>38</sup>

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37 On the Indian position, see, for example, ENDC/PV. 223, 12 Aug. 1965, pp. 19-20; ENDC/PV. 263, 10 May 1966, pp. 11-12; ENDC/PV. 299, 23 May 1967, paras. 43 and 46; ENDC/PV. 334, 28 Sept. 1967, paras. 38-41; and A/C.1/PV. 1567 (Prov.), 14 May 1968, pp. 73-75. As far as Brazil is concerned, see, for example, ENDC/PV. 327, 31 Aug. 1967, para. 13 and ENDC/PV. 363, 8 Feb. 1968, para. 43. Brazil was also worried that nuclear imports from non-nuclear-weapon States for peaceful purposes might be used by the nuclear-weapon States to serve military ends.

38 For example, see ENDC/294, 16 Mar. 1967, para. 14 (UAR).



A third group of countries, including in particular the advanced industrialised countries of Europe and Canada, insisted on the necessity of applying safeguards not only to the peaceful nuclear activities within the territories of the nuclear-weapon States but also on all transfers of source or special fissionable material or related equipment to these States.<sup>39</sup> The main preoccupations of this group of countries were industrial espionage and commercial competition. They feared that the application of international safeguards on their peaceful nuclear activities alone would restrain their capacity to compete with the nuclear-weapon States in the export of nuclear material and equipment. As mildly put by the Swiss Government in its aide-mémoire to the co-Chairmen of the ENDC, "to maintain equality in the conditions of competition between States, it would be desirable that control should extend also to the civil nuclear installations of nuclear-weapon States."<sup>40</sup> For many other countries the question of equality of treatment in the application of safeguards was a question of principle.

The Swedish proposal of an article III was very much in line with the attitude of the third group of countries. The proposal prescribed the application of the IAEA safeguards on any transfer of nuclear material or equipment from a State party to the treaty to any other State. It also prescribed that each nuclear-weapon State party to it would undertake to cooperate in facilitating the gradual application of the IAEA safeguards on the peaceful nuclear activities within its territory or territory under its jurisdiction.<sup>41</sup>

39 For example, see ENDC/PV. 299, 25 May 1967, para. 42 and ENDC/PV. 378, 13 Mar. 1968, para. 34 (Canada); and A/C.1/PV. 1672 (prov.), 12 June 1968, p. 62 (Italy).

40 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 21 (ENDC/204, 24 Nov. 1967), para. 2(e).

41 Ibid., Sec. 11 (ENDC/195, 30 Aug. 1967), paras. 1(a) and 3. See also the comparison made by the representative of Sweden at the ENDC between the Swedish text and Article III, ENDC/PV. 363, 8 Feb. 1968, paras. 19-25.

In order to face up to the pressure and dissatisfaction emanating from so many quarters, the United States and the United Kingdom Governments made their offers to submit the nuclear activities in their respective countries to international safeguards. The United States' offer was made in a statement made on 2 December 1967 by President Lyndon Johnson. The most relevant part of the statement read as follows :

"... I am ... announcing that when such safeguards are applied under the treaty, the United States will permit the (IAEA) to apply its safeguards to all nuclear activities in the United States - excluding only those with direct national security significance."<sup>42</sup> (Emphasis added.)

The United Kingdom offer was made in a statement delivered on 4 December 1967 in the House of Commons by Fredrick Mulley, the Minister of State for Foreign Affairs. It was similar to that made by the United States except that it did not specify that the safeguards to be applied would be IAEA safeguards.<sup>43</sup> This vagueness might have been intentional so as not to antagonise Euratom, an organisation to which the United Kingdom had been seeking membership along with the other European Communities.

The Soviet Union made no similar offer. However, the application of IAEA safeguards prescribed in Article III of the NPT to the nuclear activities of all the Eastern European States except the Soviet Union itself, and the latter's acquiescence not to supply nuclear assistance to its Warsaw Pact allies unless such assistance is subject to these Safeguards, were considered by a leading American NPT negotiator as a real step forward in the acceptance of international control by the Soviet Union.<sup>44</sup>

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42 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 23 (ENDC/206, 5 Dec. 1967).

43 Ibid., Sec. 24 (ENDC/207, 5 Dec. 1967).

44 Adrian S. Fisher, "Outlawry of War and Disarmament", Collected Courses of The Hague Academy of International Law,

The three nuclear-weapon States had not failed, however, to stress that it was irrelevant to impose safeguards on their activities so long as their nuclear-weapon production was not affected by the Treaty.<sup>45</sup>

The general offers made by the United States and the United Kingdom were widely welcomed. It was hoped, however, that Article III would be more universal in its application.<sup>46</sup> India in particular was sceptical, as it considered the willingness of the two countries to accept safeguards only on the peaceful nuclear activities as defined by them would make in practice the application of the safeguards illusory.<sup>47</sup>

In assessing the significance of the offers made by the two nuclear-weapon States, it should first be pointed out that the offers were residual means of accepting safeguards on their peaceful nuclear activities so long as the Soviet Union was un-

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Vol. 133, 1971 (II), pp. 404-405. At the Tenth General Conference of the IAEA held in Vienna in September 1966, both Czechoslovakia and Poland offered for the first time to put their nuclear installations under IAEA safeguards if the Federal Republic of Germany did likewise. The German Democratic Republic made a similar offer in a message addressed to the Conference. The Soviet delegation at the Conference endorsed these offers. See International Negotiations, p. 54. Until very recently some western analysts considered it very unlikely that the Soviet Union would permit the application of IAEA safeguards in the territories of its Eastern European allies. For example, see Rosen, loc.cit., p. 173.

- 45 For example, see ENDC/PV. 358, 23 Jan. 1968, para. 16 (UK); ENDC/PV. 368, 21 Feb. 1968, para. 26 (US); and ENDC/PV. 377, 12 Mar. 1968, para. 13 (USSR). As also explained by a Soviet analyst, "there can be no control without disarmament." V. Shestov, "Major Success for the Cause of Peace", International Affairs (Moscow), No. 8, Aug. 1968, pp. 5-6.
- 46 For example, see A/C.1/PV. 1561, 6 May 1968, para. 46 (Ethiopia).
- 47 A/C.1/PV. 1567 (prov.), 14 May 1968, pp. 73-75.

willing to accept safeguards on its activities by virtue of an obligation in the NPT.<sup>48</sup>

The offers made are new as to their general scope of application and their relevance to an arms control measure. Both the United States and the United Kingdom have previously offered to submit individual nuclear facilities to IAEA Safeguards. For example, the United States offered in 1966 to open a commercial nuclear fuel reprocessing facility in West Valley (New York) to IAEA inspection. The facility was engaged in reprocessing fuel from a power reactor which has already been subject to IAEA Safeguards. The offer was made as a contribution to the development of IAEA Safeguards' procedures and the training of inspectors.<sup>49</sup>

Although the United States and the United Kingdom are left unrestricted in the development of their nuclear-weapon programmes, their offers of December 1967 are not negligible and their usefulness extends, in fact, beyond the development of safeguards procedures or the training of inspectors. They can help demonstrate to all other countries that safeguards are no burden to their industrial and economic development. They can particularly help to assure the other equally advanced industrialised countries that fair commercial competition in the export of nuclear materials and equipment would not be impaired. Most important is that in a country such as the United States where large quantities of special fissionable material are spread all over the country and therefore more prone to theft or clandestine diversion than in much smaller countries, the application of international safeguards on all its peaceful nu-

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48 Adrian Fisher reported that the US argued unsuccessfully to persuade the Soviets, but the latter were unwilling because the application of safeguards in the nuclear-weapon States did not relate to the purposes of the treaty. Hearings on Arms Control, 1968, p. 60.

49 ENDC/PV. 260, 28 Apr. 1966, pp. 15-16 (US). See also UN Doc. A/7677, 24 Sept. 1969, Ann., para. 36.

clear activities is of considerable value as an arms control measure. It may induce the United States' authorities to exercise tighter controls on both private and public nuclear activities.<sup>50</sup>

The nuclear activities submitted to international safeguards would be identified by both States in the safeguards agreements concluded with the IAEA. The United States Atomic Energy Commission doubted that the IAEA would wish to apply its safeguards to all the activities listed by the United States. It was believed more likely that the IAEA would elect to apply safeguards to a representative number of US activities, at least initially.<sup>51</sup>

As to the date on which the offer is to take effect, the United States, for example, wished to consider the progress made in the adherence to the NPT and in the negotiation and implementation of the safeguards agreements signed between the non-nuclear-weapon States Party to the Treaty and the IAEA.<sup>52</sup>

At the Conference of Non-Nuclear-Weapon States, the nuclear-weapon States were urged to conclude with the IAEA the safeguards agreement in conformity with the relevant rules.<sup>53</sup>

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50 This problem is referred to, for example, by two analysts; George Quester, The Politics of Nuclear Proliferation (Baltimore and London : The John Hopkins University Press, 1973), p. 227 and Lawrence Scheinman, "Safeguarding Nuclear Materials", Bulletin of the Atomic Scientists, Vol. XXX, No. 4, Apr. 1974, p. 35. The problem is extensively dealt with in Mason Willrich, "Nongovernmental Nuclear Weapon Proliferation" in Nuclear Proliferation Problems (Stockholm ; SIPRI, 1974) (Preview Copy), pp. 168-186.

51 For a treatment of the eventual implementation of the US offer including the facilities which might be covered and those which would not be included in the offer, see the memorandum supplied by the US AEC in Hearings on NPT, 1968, pp. 110-112.

52 Ibid., p. 111.

53 Final Document of the Conference of Non-Nuclear-Weapon States (A/CONF.35/10, 1 Oct. 1968), Resolution F, pp. 10-11. This provision of the resolution was originally introduced

At the 1975 NPT Review Conference, a number of countries, especially from the industrialized world, insisted for the application of IAEA safeguards to all the peaceful nuclear activities of the nuclear-weapon States Party to the NPT. There was also great support for the idea of applying safeguards on transfers of nuclear material to the nuclear-weapon States in order to ensure that they do not contribute to the vertical proliferation of nuclear weapons. As well put by Egypt, no country should contribute consciously or unconsciously to the nuclear-weapon programmes of the nuclear-weapon States.

In June 1974, the UK, the USSR and the United States undertook, in fact, to provide the IAEA with information regarding their exports and imports of nuclear material.

Apparently the implementation of both offers had been lagging for some time as both countries preferred to await the results of the negotiations between Euratom and its non-nuclear-weapon States with the IAEA. It was expected that the offers would take effect soon after the entry into force of the Euratom/IAEA safeguards agreement, which took place on 22 February 1977.

In relation to the offer made by the United Kingdom, an Agreement with Euratom and the IAEA was signed on 6 September 1976 but did not enter into force until 14 August 1978. As to the United States, its agreement with the IAEA was approved by the Board of Governors of the Agency on 17 September 1976.

(d) Nuclear-Weapon States not Party to the NPT

These States are in principle outside the purview of Article III. However, their peaceful nuclear assistance, for example, to the non-nuclear-weapon States Party to the NPT would be subject to international safeguards; the latter States being under the obligation to submit their nuclear activities to the.

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in a draft resolution submitted by Switzerland to Committee One of the Conference, a resolution which served as a basis for the final formulation and adoption of Resolution F. See A/CONF.35/C.1/L.2, 13 Sept. 1968.

safeguards required by Article III. On the other hand, several supplier States of nuclear material, such as Canada, require the application of safeguards on their sales to any State, whether a nuclear or a non-nuclear-weapon State Party or not to the NPT. Moreover, in the case of France, its peaceful nuclear activities are already covered by Euratom safeguards. This fact made it easy for France to follow the path of the United Kingdom and sign an agreement with Euratom and the IAEA on 27 July 1978 for the application of safeguards to certain nuclear material and facilities. The IAEA would designate a certain number of these facilities for routine inspections. In the case of China, which is vehemently opposed to the NPT, it is considered extremely unlikely that it would accept international safeguards on its territory.

To sum up, it follows from the above analysis that the only States which, in theory, would not be implicated altogether by the implementation of Article III of the NPT are the States not party to the NPT and not involved in any international transaction in the field of nuclear energy with non-nuclear-weapon States Party to the NPT. In a world where international peaceful nuclear co-operation is increasing and intensifying in a complex multitude of forms, almost no State would, in practice, be unaffected by the implementation of Article III of the NPT. The fact remains, however, that the majority of States would be much more affected than others by the application of international safeguards.

## 2. The IAEA

Although the IAEA is not a party to the NPT and therefore under no obligation to fulfill any of the obligations prescribed therein, it is, as a result of these very obligations, implicated by all the provisions of Article III. The safeguards agreements required by this Article are to be negotiated and concluded with the IAEA in accordance with the Agency's Statute and safeguards system.

Throughout all the phases of the NPT negotiations, the IAEA was generally thought of as the organisation best suited for the administration of safeguards which would be required by the Treaty. IAEA safeguards were referred to in all the texts drafted on the application of safeguards in connexion with the Treaty; sometimes along with what had been called "equivalent" or "similar" international safeguards, i.e. safeguards applied by regional organisations such as Euratom.

The choice of the IAEA was quite natural. The objectives of the Agency, as stipulated in Article II of its Statute, are twofold : "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world"; and to "ensure, so far as it is able, that assistance provided by it or at its request or under its supervision or control is not used in such a way as to further any military purpose".

The IAEA Statute contains the general principles on safeguards.<sup>54</sup> They relate to health and safety controls; internal or auto-safeguards on nuclear materials held by the IAEA itself; and external safeguards on nuclear items or activities in States to prevent their diversion to any military purpose.<sup>55</sup> The principles relating to the latter safeguards were since 1961 elaborated in successive documents known as the "safeguards documents",<sup>56</sup> which in addition to another document, the inspectors document,<sup>57</sup> constitute the core of the IAEA's safeguards system.

54 In addition to Article II cited above, see Articles III.A. 5, B.1 and B.2; IX.H and I.2; XI.F.4; XII; and XIV.B.1(b) and C.

55 Paul C. Szasz, op.cit., p. 532.

56 See IAEA Doc. INFCIRC/66/Rev. 2, 16 Sept. 1968. The development of the safeguards documents will be discussed below in connexion with the purpose and scope of NPT safeguards.

57 IAEA Doc. GC(V)/INF/39, 28 Aug. 1961, Annex. This document will be later referred to in connexion with the safeguards procedures.



As stated in the last safeguards document of 1968, the document is intended "for the information of Member States, to enable them to determine in advance the circumstances and manner in which the Agency would administer safeguards, and for the guidance of the organs of the Agency itself, to enable the Board and the Director General to determine readily what provisions should be included in agreements relating to safeguards and how to interpret such provisions."<sup>58</sup>

The provisions of the safeguards document become legally binding upon the entry into force of the safeguards agreements concluded between the Agency and the States, and to the extent that they are incorporated therein, incorporation which may be made by reference.<sup>59</sup> The safeguards agreements are supplemented by "subsidiary arrangements" which include the actual procedures to be applied on the specified operations and facilities. Each facility may also be the subject of a special annex which is added as and when needed, an annex known as "facility attachment".

The IAEA safeguards document recognises three kinds of safeguards : (a) safeguards based on project agreements under which materials, services, equipment, facilities or information are supplied, and which provide for the application of safeguards; (b) safeguards requested by all the parties to a bilateral or multilateral arrangement under which materials, services, equipment, facilities or information are supplied or otherwise transferred; and (c) safeguards which a State has unilaterally requested be imposed on its nuclear activities.<sup>60</sup>

Consequently various types of agreements have been or are being developed : (a) project agreements relating to the pro-

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58 IAEA Doc. INFCIRC/66/Rev. 2, 16 Sept. 1968, para. 3.

59 Ibid., para. 4.

60 R. Lee, "Safeguards Against Nuclear Proliferation", The Year Book of World Affairs, Vol. 23, 1969, p. 151.

jects of the Agency; (b) safeguards transfer agreements concluded with pairs of States that request the Agency to apply safeguards with respect to a bilateral arrangement between them, which arrangement either provides for the exercise of safeguards by one State in the other, or sometimes for reciprocal controls. The transfer agreements, provide, inter alia, for the suspension of these national safeguards while the IAEA is exercising its controls; (c) safeguards execution agreements relating to bilateral arrangements which do not provide for any national safeguards; and (d) unilateral safeguards submission agreements relating to the submission by a State or part or all of its nuclear energy activities to safeguards.<sup>61</sup> Other types of safeguards agreements are conceivable.

The safeguards agreements required by Article III of the NPT fall within the category of unilateral safeguards submission agreements. They differ, however, from all the other unilateral submission agreements, except those required by the Treaty of Tlatelolco, in more than one respect. The agreements are required by virtue of an international arms control agreement. Their negotiation and conclusion are obligatory to the Parties to the NPT and as far as the non-nuclear-weapon States are concerned, their agreements with the IAEA in accordance with paragraphs 1 and 4 of Article III have to be concluded within certain time limits. The purpose of the NPT safeguards agreements is narrower than that of the other agreements and the scope of the former is different than that of the latter. The NPT agreements have to cover all the peaceful nuclear activities of the non-nuclear-weapon States Party to the NPT and not merely separate isolated activities. They also have to be concluded to cover all transfers, for example, of nuclear material from any State Party to the NPT to any non-nuclear-weapon State.

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61 Paul C. Szasz, op.cit., p. 566.

As a result of all these significant differences, which will be elaborated in the remaining parts of this chapter, it had been gradually felt that a new system of safeguards, parallel to the existing one, had to be devised in order to establish uniform rules applicable to the States Party to the NPT, which would avoid the duplication of safeguards applied on a bilateral basis or administered by regional organisations.

Article III of the NPT does not, in fact, prohibit the establishment of a new system of safeguards. As explained by the US representative at the ENDC, the reference to the IAEA's safeguards system in the first paragraph of Article III should not be construed as incorporating the then existing safeguards system documents in the Treaty in the sense that a treaty amendment would be required to revise these documents. This interpretation, as further explained by the US representative, was reinforced by the NPT preambular paragraph expressing support for research and development on safeguards within the general framework of the IAEA safeguards system, which itself provided for periodic review in the light of further experience as well as of technological developments.<sup>62</sup>

At the ENDC, the UAR, without insisting on a re-examination of the IAEA Statute and its safeguards system, suggested the re-organisation of the Agency, and more particularly its safeguards department, administratively and technically, to enable the Agency to assume its duties laid up on it by the NPT.<sup>63</sup> Spain was, however, the first to suggest at the First Committee of the UN General Assembly the establishment of a committee in which the countries subject to inspection under the NPT would participate and to which the IAEA Board of Governors would delegate all matters relating to such inspections.<sup>64</sup>

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62 ENDC/PV. 357, 18 Jan. 1968, para. 50. See also ENDC/PV. 358, 23 Jan. 1968, para. 13 (UK) and para. 70 (Canada); and ENDC/PV. 368, 21 Feb. 1968, para. 34 (US).

63 ENDC/PV. 367, 20 Feb. 1968, para. 24.

64 A/C.1/PV. 1569 (prov.), 16 May 1968, p. 82.

The previous suggestion was repeated by Spain at the Conference of Non-Nuclear-Weapon States,<sup>65</sup> and formalised into a draft resolution submitted to Committee One of the Conference. The draft resolution recommended the establishment within the IAEA of a special committee on safeguards of which countries possessing nuclear facilities or supplying nuclear materials might be members if they so desired. The special committee was to be responsible for setting up and, if necessary, modifying the Agency's system of safeguards and for supervising the strict observance of that system.<sup>66</sup> Spain's proposal was mainly motivated by its concern that the IAEA Board of Governors, the organ responsible for operating the safeguards system, was not sufficiently representative of all countries.<sup>67</sup>

After a series of modifications and affiliations with other proposals,<sup>68</sup> the Spanish proposal finally found its place in Resolution F adopted by the Conference of Non-Nuclear-Weapon States.<sup>69</sup> The establishment within the IAEA and under its Board of Governors of an institutional machinery on safeguards, as recommended by Resolution F, was not directly commented on by the IAEA in its first report on the recommendations made by the Conference, a report which was submitted to the UN General Assembly at its 24th session in 1969. The IAEA reported, however, that since September 1968, groups of high-level consultants had been studying and developing criteria and practices that should be followed in applying the safeguards system under the NPT.<sup>70</sup>

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65 A/CONF.35/SR.9, 10 Sept. 1968, p. 118.

66 A/CONF.35/C.1/L.1, 12 Sept. 1968 and A/CONF.35/C.1/SR.7, 13 Sept. 1968.

67 A/CONF.35/C.1/SR.11, 18 Sept. 1968, p. 57.

68 See A/CONF.35/C.1/L.1, 13 Sept. 1968 (Switzerland); L.9, 21 Sept. 1968 and L.9/Rev. 1, 24 Sept. 1968 (Spain and Switzerland); L.12, 21 Sept. 1968 (Chile); L.14, 24 Sept. 1968 (Argentina, Brazil, Columbia, Chile, Ecuador, Spain and Switzerland); and L.16, 25 Sept. 1968 (Mauritius).

69 See note 22 above.

70 IAEA Doc. GC(XIII)/INF/110, 29 July 1969, para. 22.

It was only after the entry into force of the NPT on 5 March 1970 that the IAEA Board of Governors established the Safeguards Committee which in a period of ten months accomplished its mission by producing the model agreement on the structures and content of the NPT safeguards agreements (INFCIRC/153), the so-called blue book.<sup>71</sup> The model agreement consists of two parts. The first part contains the fundamental rights and obligations of the Parties. The second part specifies the procedures to be applied for the implementation of the safeguards provisions of the first part.

The safeguards document of 1968 continues to operate in those countries that have not concluded safeguards agreements with the IAEA under the NPT. It will even operate, as will be explained below, with respect to peaceful nuclear transactions between the States Party to the NPT and the non-nuclear-weapon States not party to it.

The two systems of safeguards will have to co-exist so long as there are States which prefer not to adhere to the NPT, either because they are not hostile to the application of international safeguards or because they are bound to accept them as a condition for receiving assistance. The main features of the two systems will be compared in the course of the analysis carried out below.<sup>72</sup> It suffices to point out here that the new safeguards system takes into account the major differences, previously referred to, between the safeguards agreements required by the NPT and the other unilateral safeguards submission agreements. In particular, since safeguards will have to be applied by the IAEA for the first time in its history to an increasing nuclear activity in a great

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71 See R. Rometsch, "Development of the IAEA Safeguards System for NPT", pp. 385-396.

72 For an excellent brief comparison of the two systems, see "Safeguards - Old and New", IAEA Bulletin, Vol. 15, No. 1, 1973, pp. 23-30.

number of States, the new system had to be based on objective rules rather than on subjective judgment.

As a result of its new responsibilities in the application of safeguards, the IAEA had also to envisage an increase in its manpower requirements. In 1970, before the implementation of the provisions of Article III of the NPT, the Agency was party to 44 agreements involving 32 States and covering 10 nuclear-power reactors and 68 other reactors. Those 10 nuclear-power reactors had a total capacity of 2.900 MW(e).<sup>73</sup> In the same year, the IAEA estimated that in 1975 83 power reactors with a total capacity of 33.000 MW(4) and 29.000 effective kilograms of nuclear material would be safeguarded. Accordingly the costs of safeguards were expected to increase. It was estimated that in 1975, for example, the percentage of these costs in the assessed IAEA budget would be somewhat less than 25 per cent instead of 10 per cent in 1970.<sup>74</sup>

In spite of these estimates, the IAEA proceeded slowly in expanding its Department of Safeguards and Inspection and in strengthening the other divisions involved in the application of safeguards, such as the Legal Division and the Division of Research and Laboratories. The earlier forecasts made in 1968 by the Director-General of the IAEA on the number of officials needed in 1973 or 1974 for the Department of Safeguards and Inspection proved to be exaggerated. Instead of the figure 200 suggested then by the Director-General, the staff of that department did not exceed 86 officials in August 1973 with an increase of 14 officials when compared with the staff figures of 1971.<sup>75</sup>

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73 A/PV. 1917 (prov.), 4 Dec. 1970, p. 11 (Dr. Sigvard Ekklund, the Director-General of IAEA).

74 Ibid.

75 See IAEA Docs. INFCIRC/22/Rev. 11, 6 Aug. 1971, pp. 20-21 and Rev. 13, 21 Aug. 1973, pp. 19-20. Out of the 14 appointees, 11 were professional officers assigned to the Division of Operations responsible for carrying out inspections.

The expansion in the manpower of the Department of Safeguards and Inspection had not occurred as rapidly as expected for two main reasons. First, the new safeguards system is relying on improved safeguards practices reducing the need for on-site inspections. Secondly, several countries that have significant nuclear activities had either refused to adhere to the NPT or had awaited the conclusion of their safeguards agreements with the IAEA, as the case was, for example, with the Member States of Euratom.

By 1978, the number of facilities safeguarded by the IAEA was 92 entailing 1,045 man-days (MD) of inspection effort and a total cost of \$12,027,000 representing 20.4 percent of the total IAEA budget of \$59,035,000. The number of inspectors available to perform the required verification activities rose to 131 by the end of that year.<sup>76</sup>

### 3. Regional Organisations and the Special Case of Euratom

A few number of regional organisations were attributed a control function with respect to the use of nuclear energy for military or peaceful purposes. They are the Western European Union (WEU), the Nuclear Energy Agency (NEA), Euratom and the Agency for the Prohibition of Nuclear Weapons in Latin America (OPANAL). With the exception of the WEU, all the other organisations were applying or entitled to apply safeguards similar or complementary to those actually practiced by the IAEA. None of these organisations, except Euratom, had raised any serious problems in the process of formulation or implementation of Article III of the NPT. They deserve, however, a brief review before dealing with the special case of Euratom, which was virtually the organisation destined by the NPT to become a party to the application of the safeguards required by Article III.

<sup>76</sup> For more details, see Preparatory Committee for the Second Review Conference of the Parties to the NPT, IAEA Activities under Article III of NPT (NPT/CONF.II/PC.II/7, 23 July 1979), pp. 15-17, hereinafter cited as Doc. NPT/CONF. II/PC.II/7, 25 July 1979.

(a) Western European Union (WEU)<sup>77</sup>

The failure to bring into force the European Defence Community (EDC) established on paper in May 1952 with the objective of creating a European Army within which national contingents would have lost their identities and within which a re-armed West Germany would have found a place, had prompted two years later the establishment of the Western European Union. This was achieved in Paris in October 1954 by the accession of the Federal Republic of Germany and Italy to the Brussels Treaty of Alliance which was concluded in 1948 between the Benelux countries, France and the United Kingdom. The Treaty itself was modified and three Protocols were added imposing restrictions on the forces and arms of Member countries and establishing an Armaments Control Agency. These instruments came into force on 6 May 1955.

Among the main terms of the 1954 arrangements were the renunciation by the FRG of the production on its territory of atomic, biological and chemical weapons, and the agreement of the Benelux countries, France and Italy that when effective production of atomic, biological or chemical weapons had begun on their territories, the level of stocks they would hold was to be decided by the WEU Council.

The Armaments Control Agency was to verify by two methods these restrictions and others pertaining to the general levels of production and stocks of armaments held by each State on the mainland of Europe. The first method was by the cross-checking of budgetary and other statistical data which Member States were required to supply. The second was by the physical inspection of military installations, units, depots, factories and shipyards. The physical inspection was not to be of a rou-

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<sup>77</sup> The following is essentially based on Raymond Fletcher, "Western European Union" in Wayland Young (Ed.), Existing Mechanisms of Arms Control (London : Pergamon Press, 1966), pp. 1-9 and Appendix A.



tine character but was to be in the nature of tests carried out at irregular intervals.

A Convention signed in December 1957 containing the necessary regulations for carrying out the checks prescribed by the Paris instruments of 1954 has not come into force. France has, in fact, taken no steps to ratify the 1957 Convention. It has refused to allow its nuclear-weapons programme to be inspected. As a result, the Armaments Control Agency is left dormant, except that it can only carry out what it calls "control exercises". It asks permission of national authorities and private firms to visit installations, and then does so. In the nuclear weapons field the Agency has not even the qualified staff to carry out such "control exercises", if permitted by the countries concerned.

In spite of the paralysis suffered by the Armaments Control Agency, the Assembly of the WEU has served as a valuable forum for debating matters pertaining to arms control and disarmament. It had, for example, attached considerable attention to the negotiations of the NPT and its early implementation. As six members of the WEU were at that period Members of Euratom, the Assembly's debates were an occasion for these countries to bring to the fore their preoccupations as Members of Euratom.<sup>78</sup>

(b) Nuclear Energy Agency (NEA)<sup>79</sup>

NEA as an organisation involved in promoting the co-operation in the field of peaceful uses of nuclear energy was briefly discussed in Chapter 6. It remains for us here to review its role as inspectorate.

<sup>78</sup> For example, see Assembly of Western European Union, Proceedings, 15th Ordinary Session, Part 2, III, Dec. 1969, pp. 207-227 and Ibid., Part 2, IV, Dec. 1969, pp. 73-78 and 105-106.

<sup>79</sup> The following is essentially based on Einar Saeland, "The European Nuclear Energy Agency" in Wayland Young (Ed.), op.cit., pp. 37-48 and Appendix C.

On 20 December 1957, the day on which its predecessor organisation - the European Nuclear Energy Agency (ENEA) - was set up, a Convention on the Establishment of a Security Control in the Field of Nuclear Energy was signed by its Member States. On the same day, most of these countries also signed the Convention creating the Eurochemic, located in Mol (Belgium), which was made subject to the control system established by the Security Control Convention. The latter came into force on 22 July 1959.

The establishment of a control system was motivated by the wish of some countries not to join in nuclear activities unless formal assurance could be given that such activities could not further any military purpose. Moreover, when ENEA was established, the world-wide system to be set up by the IAEA had not yet come into operation and, in any case, it had seemed logical that control over the joint action of the Member countries be exercised through a system comprising these very countries.

The security control applies automatically to any joint undertaking established through the Agency and to any materials, equipment and services made available by the Agency or under its supervision. The system may also be applied to an agreement among two or more parties to the Convention, at their request, or to an activity for which a Government is responsible in the field of nuclear energy at the request of such Government. The security control system also has what has been referred to as the "right of pursuit", i.e. the right to control nuclear materials, once they have become subject to the system, wherever they may be subsequently sent. The purpose of security control is to ensure that all these activities do not further any military purpose.

The application of the system is the responsibility of three different organs; the NEA Steering Committee, the Control Bureau and the Nuclear Energy Tribunal. The Control Bu-

reau is charged with actually carrying out the control, but in doing so it is subject to the administrative supervision of the Steering Committee.<sup>80</sup>

Operation of the system has been simple and inexpensive because in practice it has been applied only to NEA joint undertakings and to those installations which have become subject to control as a result of the "right of pursuit".

During the NPT negotiations there had been little concern by the Members of the Agency as to whether the safeguards system they had devised would have to be replaced or supplemented by IAEA safeguards. In the past when projects involving both Euratom and ENEA or some of their overlapping Members might have resulted in jurisdictional disputes as to which organisation should exercise the safeguards function, the ENEA had been willing to subordinate itself.<sup>81</sup> For example, Euratom is applying its own control system to Eurochemic which is situated in Belgium, a Member State of Euratom.

The problem of the application of IAEA safeguards as required by Article III of the NPT rested, therefore, with Euratom. There was no question that NEA would become itself a party to the application of these safeguards. Some of NEA's Member States had already negotiated and signed separately the safeguards agreements required by Article III. Safeguards agreements were even in force in Denmark and Ireland before both countries became members of the European Communities in January 1973.<sup>82</sup> But before dealing with the special case of Euratom, one organisation remains to be discussed.

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<sup>80</sup> See Ibid., pp. 42-44.

<sup>81</sup> Collier, loc.cit., p. 470. See also Articles 16 and 21(c) of the Security Control Convention in Wayland Young (Ed.), op.cit., Appendix C.1.

<sup>82</sup> The safeguards agreements with Denmark and Ireland entered into force on 1 March 1972 and 29 February 1972 respectively. In the Protocol attached to each of the two agreements it was agreed that if the State became a member of

(c) Agency for the Prohibition of Nuclear Weapons in Latin America (OPANAL)

The Agency was established by the Treaty of Tlatelolco "(i)n order to ensure compliance with the obligations of this Treaty."<sup>83</sup> The principal organs of the Agency are the General Conference, the Council and the Secretariat.<sup>84</sup>

The control system is prescribed in Articles 12 to 16 and Article 18, paragraphs 2 and 3 of the Treaty.<sup>85</sup> Briefly, each Contracting Party shall negotiate multilateral or bilateral agreements with the IAEA for the application of its safeguards to its nuclear activities. But besides the application of IAEA safeguards, the Treaty of Tlatelolco assigns important functions of control to the principal organs of OPANAL. The Treaty also provides for submission by the Contracting Parties of periodic and special reports, and the carrying out of special inspections under certain circumstances.

The Tlatelolco control system is, in fact, greater in scope than the safeguards systems (old and new) of the IAEA. The Tlatelolco system is to be used not only to verify "(t)hat devices, services and facilities intended for peaceful uses of nuclear energy are not used in the testing or the manufacture of nuclear weapons", but also to verify :

"... That none of the activities prohibited in article 1 of this Treaty are carried out in the territory of the Contracting Parties with nuclear materials or weapons introduced from abroad, and ... That explosions for peaceful purposes are compatible with article 18 of this Treaty."<sup>86</sup>

Euratom, and if an agreement was in force between the IAEA and Euratom, the safeguards agreement between the State and the IAEA would be replaced by the IAEA/Euratom agreement. See, for example, the safeguards agreement with Denmark in IAEA Doc. INFCIRC/176, 9 Apr. 1973, p. 28.

83 Appendix 8, Article 7.

84 Ibid., Articles 8-11.

85 Ibid.

86 Ibid., Article 12.

With respect to the verification of the activities prohibited by Article 1 of the Treaty, Article 16 authorises the Council of OPANAL to carry out special inspections at the request of any Contracting Party in order to enable it to search a State for unregistered items or activities. The IAEA safeguards systems (old and new) are limited, as will be shown below, to the control of items notified to it. They do not provide for special inspections to search for undeclared activities.<sup>87</sup>

With respect to the verification of nuclear explosions for peaceful purposes, the IAEA, as previously examined in this study, devised separate guidelines for the international observation required by Article V of the NPT,<sup>88</sup> which are also applicable to the Parties of other international agreements calling for such observation,<sup>89</sup> e.g. the Treaty of Tlatelolco.

Mexico was the first country to have signed with the IAEA on 6 September 1968 the safeguards agreement required by Article 13 of the Treaty of Tlatelolco.<sup>90</sup> However, as a Party as well to the NPT, Mexico signed on 27 September 1972 a new safeguards agreement which satisfies the requirements of both international instruments.<sup>91</sup> Some other Contracting Parties to the Treaty of Tlatelolco followed the Mexican example but without first concluding a separate agreement under the Treaty of Tlatelolco.<sup>92</sup>

As both the IAEA and OPANAL are involved in matters relat-

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87 The IAEA Statute, however, is broad enough to allow the IAEA to carry out special inspections. See Articles III. A.5 and XII.A.6 of the Statute.

88 See Chapter 7.

89 See IAEA Doc. INF/CIRC/169, 16 Jan. 1973, para. 2.

90 IAEA Doc. INF/CIRC/118, 23 Sept. 1968.

91 IAEA Doc. INF/CIRC/197, 13 Dec. 1973. The agreement entered into force on 14 September 1973.

92 For example, see the safeguards agreement between the Dominican Republic and the IAEA in IAEA Doc. INF/CIRC/201, 21 Feb. 1974.

ing to the work of each other, they signed on 3 October 1972 the co-operation agreement, previously referred to in Chapter 6, which provides for co-operation and consultation, reciprocal representation and exchange of information and documents.<sup>93</sup>

(d) The Special Case of Euratom

In Chapter 6, Euratom was briefly discussed as a channel of regional co-operation in the field of peaceful uses of nuclear energy. Euratom's function as inspectorate remains to be discussed.

The safeguards system of Euratom,<sup>94</sup> for the implementation of which the Commission of the European Communities is responsible, is based on the provisions of Chapter VII of the Euratom Treaty and on the regulations made and the procedures established by the Commission for the purpose of implementing the Treaty's provisions.

It is not intended here to proceed to a detailed review of the safeguards system. The attention is rather focused on the distinguishing features and the essential elements of the system, which would allow in the course of the analysis undertaken below a clear assessment of their impact on the implementation of Article III of the NPT, especially as far as the Euratom countries are concerned.

The aims of Euratom safeguards are defined in Article 77 of the Euratom Treaty, under the terms of which "the Commission shall satisfy itself that in the territories of Member

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93 IAEA Doc. INFCIRC/25/Add. 4, 15 Dec. 1972.

94 What follows in connexion with Euratom's safeguards system is essentially based on Jacques van Helmont, "The European Atomic Energy Community" in Wayland Young (Ed.), op.cit., pp. 23-36 and E. Jacchia and S. Finzi, "Le contrôle de sécurité de la Commission des Communautés européennes" (A/CONF.49/P/725 : EURATOM) in Peaceful Uses of Atomic Energy, Vol. 9, pp. 367-383. The Euratom Treaty articles quoted below are reprinted in Wayland Young (Ed.), op.cit., Appendix B, pp. 119-122.

States : (a) ores, source materials and special fissionable materials are not diverted from their intended uses as stated by the users; and (b) the provisions concerning supplies and any special undertaking concerning measures of control entered into by the Community in an agreement concluded with a third country or an international organisation are observed." (Emphasis added.)

However, nuclear materials which are admittedly intended for military purposes are exempted from the safeguards system. Article 84 of the Euratom Treaty states that "(c)ontrol may not extend to materials intended for the purposes of defence which are in the course of being especially prepared for such purposes or which, after being so prepared, are, in accordance with an operational plan, installed or stocked in a military establishment."

The other distinguishing features of the system are as follows :

- The system is mandatory and directly applicable on the territory of each State. In other words, no safeguards agreements are required to be concluded between Euratom and the Member States, since a sufficient basis is established in the Euratom Treaty, and the regulations made and the procedures established by the Commission.

- The Commission which is responsible for exercising supervision is placed in a direct relationship with the holders of materials subjected to control; and this enables the Commission, and more particularly its duly authorised inspectors, to have direct access to the enterprises.

- The system applies, without any restrictions as to time, to all activities connected with the peaceful uses of nuclear energy in the Member countries.

- The system is essentially concerned with nuclear material. It does not cover equipment and facilities unless Euratom undertakes an international commitment to this effect.

The essential elements of the safeguards system are on the one hand the declarations made by the firms to the Commission, and on the other hand the on-the-spot checks carried out by the inspectors.

With regard to the declarations made by the firms to the Commission, the latter made two regulations in 1959; numbered 7 and 8. Under Regulation No. 7, the Commission maintained a permanent inventory of nuclear installations and their capacities. Under Regulation No. 8, the Commission was kept informed of these installations' actual activities.

With regard to the on-the-spot checks carried out by the inspectors, the Safeguards Department of Euratom comprised in 1971 sixty employees divided between two divisions : "Accounting" and "Inspection and External Commitments". The Commission's inspectorate consisted then of 32 inspectors and assistant inspectors. Some of them carry out the "accounting" checks and others the "technical" checks.

By 31 December 1970, few months after the entry into force of the NPT, a total of 250 installations had submitted statements of their basic technical characteristics. At the same date, moreover, 22 mines and 67 installations not involved in the nuclear fuel cycle were registered with the Safeguards Department.

Since Euratom came into being and until the safeguards agreement between the Commission and the IAEA had been negotiated and concluded in compliance with Article III of the NPT, no formal relationship had been established between Euratom and the IAEA. Such relationship could have been established in accordance with Article XVI.A of the IAEA Statute which provides for the establishment of appropriate relationship between the Agency and any other organisations the work of which is related to that of the Agency. Moreover, the co-operation agreement of 8 November 1958 between Euratom and the



United States, whereby the Community secured American recognition of Euratom's control system and American agreement not to inspect the uses made of the materials and equipment with which the United States supplied the Community, envisaged a certain relationship between Euratom and IAEA. The Euratom was prepared, according to Article XII of the 1958 agreement, to undertake the following :

- To consult with and exchange experiences with the IAEA with the objective of establishing a system reasonably compatible with that of the Agency.

- To consult with the United States from time to time to determine whether there were any areas of responsibility with regard to safeguards and control in which the Agency might be asked to assist. In the exchange of correspondence between Euratom and the United States, an understanding was recorded that "in the event of the establishment of an international safeguards and control system by the IAEA, the United States and Euratom will consult regarding the assumption by that agency of the safeguard and control over the fissionable material utilized or produced in implementation of the program contemplated ..."<sup>95</sup>

The Euratom lagged in meeting not only these obligations but also in agreeing to scientific methods by which the United States could satisfy itself of the effectiveness of Euratom safeguards.<sup>96</sup> However, there had been informal technical contacts as to safeguards methodology between the IAEA and Euratom, which had depended in large measure on initiatives by the IAEA.<sup>97</sup>

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<sup>95</sup> Allan D. McKnight, Nuclear Non-Proliferation : IAEA and Euratom (New York : Carnegie Endowment for International Peace, 1970), pp. 18-19, hereinafter cited as Nuclear Non-Proliferation. Article XII of the 1958 agreement is reproduced in Ibid., Appendix II, pp. 94-95.

<sup>96</sup> Ibid., p. 20.

<sup>97</sup> Ibid., and Paul C. Szasz, op.cit., p. 627.

Euratom's lagging attitude in establishing a safeguards system compatible with that of the IAEA or in letting the latter to assist in the responsibility of safeguarding the materials used or produced in the Member States of Euratom was due to conceptual and political reasons.

Euratom's system of safeguards was conceived, developed and applied some time before the first IAEA safeguards document was adopted by the Agency on 31 January 1961,<sup>98</sup> and long before the Agency's safeguards system was developed in 1968 to englobe as well almost the whole nuclear fuel cycle.<sup>99</sup> As time went by and as experience was acquired in the application of its own safeguards system, Euratom became solidly attached to its system, which was not only effective but also conceptually different than that of the IAEA.

If compared with the above mentioned features of the Euratom system, the IAEA system of 1968 has the following main counterpart features :

- Safeguards are applied to ensure that the assistance provided is not used in such a way as to further any military purpose. In other words, IAEA safeguards restrict activities to peaceful uses while Euratom places no limitation on permissible "intended uses".

- The system is based on the voluntary submission of States of some or all their nuclear activities to safeguards through the negotiation and conclusion of agreements with the Agency. Moreover, safeguards are applied only during the period provided for in the agreements.

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98 IAEA Doc. INF/CIRC/26, 30 Mar. 1961.

99 IAEA Doc. INF/CIRC/66/Rev. 2, 16 Sept. 1968. Uranium enrichment plants are neither covered by that document nor by the Euratom safeguards system.

- IAEA safeguards cover not only materials but also equipment and facilities.<sup>100</sup>

On the political level, the Euratom safeguards system was the most successful achievement of Euratom at a time when the Community was encountering serious difficulties on other fronts, as previously referred to in Chapter 6. Euratom's jealous attachment to its own system of safeguards was, therefore, one way to manifest its political *raison d'être* as one of the three pillars of European construction.

The success of Euratom as inspectorate and the Community's close relationship with the United States had their influence in formulating Article III of the August 1965 American draft of a non-proliferation treaty. The article prescribed "the application of International Atomic Energy Agency or equivalent international safeguards".<sup>101</sup> The US representative at the ENDC explained that the provision was drafted in that form "to take account of the views of all countries, including those which are not prepared at this time to commit themselves to accept IAEA safeguards in all applicable circumstances."<sup>102</sup>

The 1965 formula was not welcomed by the Soviet Union which had previously objected in the IAEA to granting observer status to Euratom. The Soviet Union representative at the First Committee of the UN General Assembly argued that Euratom was a closed organisation consisting of a group of States belonging to the same military alliance, i.e., NATO, and that the Community's Statute did not specifically prohibit the use of nuclear energy for military purposes.<sup>103</sup>

100 For a detailed comparison of the Euratom and IAEA safeguards system made by the US AEC in January 1967, see Hearings on NPT, 1968, pp. 266-276.

101 see Appendix 3-A. The Pastore formula of 1966 mentioned "similar safeguards". Hearings on Nonproliferation of Nuclear Weapons, 1966, Appendix 12, pp. 147-148.

102 ENDC/PV. 224, 17 Aug. 1965, p. 19.

103 For example, see GAOR, 21st Sess., 1st Cttee, 1431st mtg,

The eight non-aligned members of the ENDC were also not in favour of permitting the application of safeguards other than those of the IAEA. Sweden's representative at the ENDC was most outspoken in this regard. Mrs. Alva Myrdal warned that it should not be overlooked that too wide a range of different control mechanisms, with varying rules, would tend to create confusion and diminish their total effectiveness.<sup>104</sup> In her view, international safeguards must mean a system open to the observance of all States. Sweden could hardly accept verification which was taking place inside a closed system as being equivalent to IAEA safeguards at least if there could not be established some adequate co-operative arrangements for verification purposes between the IAEA and the so-called equivalent system.<sup>105</sup>

The concern expressed was not only a concern for the effectiveness of safeguards but also for the avoidance of disparity in industrial and commercial competition in the nuclear field between the Members of Euratom and the other equally advanced countries.

As a result of the Soviet pressure and general discontent with the 1965 American formula, the United States, which in essence was in favour of the establishment of a single international system of safeguards,<sup>106</sup> opted only for IAEA safeguards in the draft article III circulated in February-March

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20 Oct. 1966, para. 7 and 1445th mtg, 7 Nov. 1966, para. 17.

104 ENDC/PV. 243, 24 Feb. 1966, p. 7. See also ENDC/PV. 245, 3 Mar. 1966, p. 9 (UAR).

105 ENDC/PV. 281, 11 Aug. 1966, p. 6. India, as far as I know, called for arrangements between IAEA and Euratom with respect to safeguards. Euratom's system was considered by India as a multinational and not an international arrangement. Mazrui, *loc.cit.*, pp. 812-813.

106 For example, see GAOR, 21st Sess., 1st Cttee, 1448th mtg, 9 Nov. 1966, para. 10.

1967 among the Euratom countries and other Members of NATO and the ENDC.<sup>107</sup>

The NPT negotiations and, more particularly, the attempts to adopt the IAEA safeguards system as the only system applicable to all the parties to the NPT, brought to the surface not only the above mentioned conceptual and political reasons which had kept Euratom aloof from the IAEA system, but also some other considerations which were invoked for the first time by the Euratom countries to justify the retention of their own system of safeguards.

It was argued that since France as a nuclear-weapon State would not be subject to the application of safeguards under the NPT, the inspection of French nuclear activities might cease to apply if Euratom gave up its safeguards system. It was estimated that one-third of the research and production facilities under Euratom control were in France. Such a situation would result, it was further argued, in a discriminatory control system within Euratom hindering the creation of a European nuclear industry. It was feared that France's exemption from any control might result in a displacement of nuclear research and industry from the controlled Members of Euratom, or that it would impede joint activities involving France and other States.<sup>108</sup> Lastly, industrial espionage and the possibility of being inspected by Soviet or other Eastern European inspectors were emphasised.<sup>109</sup>

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<sup>107</sup> Sullivan III, loc.cit., pp. 365-366.

<sup>108</sup> S. Collier, loc.cit., p. 468.

<sup>109</sup> For example, the Federal Republic of Germany hoped in the field of fast reactors to achieve its traditional role as a major exporter of capital equipment and in this field of nuclear fuel as well. It was feared that the opening of the German plants to international inspection by national governments other than its partners in Euratom, would lead to a stealing of German industrial secrets and put it at a disadvantage as potential exporter competing with the US and the United Kingdom. McKnight, Nuclear Non-Proliferation, pp. 26-27.

The most important effect the NPT negotiations had on Euratom was the higher degree of cohesion which developed among its Members who seized the opportunity to assert the validity of their Community. The Federal Republic of Germany played a leading role in defending Euratom's effectiveness in safeguarding the nuclear activities of its Members. As well put by an analyst of the NPT, "West Germany regards Euratom as important because it symbolizes her integration in Western Europe, especially at a time when she is pursuing such an active Ost-politik. It also helps meet increasing domestic resentment of discrimination against her in international relations. With these reservations, the Bonn Government is anxious to ratify the NPT as part of its policy of normalizing relations with the Soviet Union, which produced the recent historic Russo-German Treaty."<sup>110</sup>

As a result of Euratom pressure this time, a subsequent US draft reintroduced the concept of regional inspection, but subjected it to a proviso that if no agreement were reached between Euratom and the IAEA within three years of the treaty's coming into force, the IAEA system would automatically apply on the territory of the European Communities (the so-called guillotine clause).<sup>111</sup> A number of ENDC Members were ready to go along with the United States and accept a period of transition at the end of which the Euratom system of safeguards would have been adjusted to or absorbed into a single univer-

<sup>110</sup> Robert Ranger, "The NPT Two Years On : Lessons for Arms Control", The World Today, Vol. 26, No. 11, Nov. 1970, p. 454. On the individual positions of the FRG as well as the other Members of Euratom, see Scheinman, "Euratom and the IAEA", pp. 69-74 and McKnight, Nuclear Non-Proliferation, pp. 23-28. On the question of Euratom, the FRG was attacked by the Soviet Union for creating obstacles hindering the drafting and conclusion of the NPT. For example, see ENDC/PV. 339, 17 Oct. 1967, paras. 28-30.

<sup>111</sup> Lawrence Scheinman, "Euratom and the IAEA" in Boskey and Willrich (Eds.), op.cit., p. 64.

sal system.<sup>112</sup> Sweden's draft of article III prescribed in its paragraph 4 a transitional period of three years from the date of the original entry into force of the treaty.<sup>113</sup>

The Euratom countries were also against the so-called guillotine clause. The assurance that there would be no such clause was one of the five conditions which they felt would have to be met if a non-proliferation treaty were not to conflict with the Euratom Treaty. The other four conditions which were put forward in October 1967 were :

- Control should be exercised on the use of nuclear materials and not over installations as such.

- Agreement on the Treaty should be subordinated to a satisfactory arrangement between Euratom and the IAEA.

- The arrangement should concern the verification of Euratom control methods and not direct IAEA control.

- Until agreement was reached, the supply of nuclear materials to the Community should be assured.<sup>114</sup>

Most of these conditions were met either in the provisions of Article III of the NPT and the arrangements which were made for their implementation or through private understanding with the United States with regard to the uninterrupted supply of nuclear materials to the Community. At this juncture, it suffices to cite the first sentence of paragraph 4 of Article III which states that :

"Non-nuclear-weapon States Party to the Treaty  
shall conclude agreements with the International

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112 For example, see ENDC/PV. 295, 21 Mar. 1967, paras. 38-39 (UK); ENDC/PV. 300, 30 May 1967, paras. 7 and 11-14 (Sweden); and ENDC/PV. 336, 5 Oct. 1967, para. 51 (Ethiopia).

113 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 11 (ENDC/195, 30 Aug. 1967).

114 The five conditions are cited in Collier, loc.cit., pp. 468-469.

Atomic Energy Agency to meet the requirements of this article either individually or together with other States in accordance with the Statute of the International Atomic Energy Agency." (Emphasis added.)

In explaining this provision of Article III upon its introduction for the first time in the identical treaty drafts of 18 January 1968, the US representative stated that :

"This provision permits the IAEA to enter into an agreement concerning the safeguards obligations of the parties with another international organisation the work of which is related to IAEA and the membership of which includes the parties concerned."<sup>115</sup>

Moreover, one of the three principles which guided the formulation of Article III, as already mentioned at the outset of this chapter, was that "the IAEA should make appropriate use of existing records and safeguards".<sup>116</sup>

Euratom as an international organisation the work of which was related to the IAEA was, therefore, entitled to negotiate and conclude a safeguards agreement with the latter.<sup>117</sup> However, as Euratom itself was not entitled to become a party to the NPT, its Members had to participate with the Commission of the European Communities in negotiating and concluding the required safeguards agreement. Their participation was even inescapable as some of the obligations would be strictly incumbent on them as individual States.

Before starting the negotiations with the IAEA, the Euratom countries had to establish a common stand. In accordance with Article 103 of the Euratom Treaty Member States are under

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<sup>115</sup> ENDC/PV. 357, 18 Jan. 1968, para. 53.

<sup>116</sup> Ibid., para. 55.

<sup>117</sup> Article 101 of the Euratom Treaty also entitles the Community to enter into obligations by means of an agreement with an international organisation. The negotiation of such an agreement should be carried out by the Commission with the approval of the Council. See UNTS, Vol. 298, 1958, pp. 203-204.



the obligations to communicate to the Commission any draft agreement or convention if such agreement or convention concerns the field of application of the Treaty.<sup>118</sup> Within the Council of Ministers of the European Communities there was agreement on two basic points : not to accept direct controls by the IAEA and not to ratify the NPT before the conclusion of the safeguards agreement with the IAEA. The first point was a reaffirmation of Euratom's previous stand that there should be a verification of Euratom control methods and no direct IAEA control. With respect to the second point, it was considered premature to ratify the Treaty before agreeing on the modalities of the application of Article III. As the negotiations with the IAEA were expected to be long and difficult, this policy stand had also the virtue of relieving Euratom Members of the time limits prescribed by Article III-4 for the negotiation and entry into force of the safeguards agreements. Upon signature of the NPT, each of the non-nuclear-weapon States Members of Euratom made declarations to the effect that ratification of the NPT would take place only after the safeguards agreement with Euratom had been concluded.<sup>119</sup>

The negotiations between the IAEA and Euratom were rather difficult for both organisations to carry out. On the one hand, the IAEA had always considered Euratom a problem because it weakened the Agency's claim of universality, especially in the field of safeguards.<sup>120</sup> The negotiations with Euratom was an opportunity for the Agency to assert its leadership in this

<sup>118</sup> Ibid., p. 204.

<sup>119</sup> For example, see paragraph 17 of the statement made by the Government of the FRG on signing the Treaty on 28 November 1969 in Treaty on the Non-Proliferation of Nuclear Weapons. German Attitude and Contribution. Documentation, p. 64.

<sup>120</sup> See Scheinman, "Nuclear Safeguards", p. 34. Scheinman quotes several statements made by Dr. Sigvard Eklund, the Director-General of the IAEA, reflecting a concern for Agency universality.

domain. On the other hand, Euratom had to defend its safeguards system, one of its most successful achievements since its establishment. It had to try to avoid as far as possible IAEA interference in the application of safeguards in the territories of its Members. However, Euratom's position in the negotiations was precarious. It had to take into account its reliance on the United States and the United Kingdom for the supply of nuclear material. In accordance with Article III-2 of the NPT both countries are under the obligation not to provide nuclear material to any non-nuclear-weapon State unless such material is subject to safeguards required by this article. The private understandings with the United States for the continuation of supply of nuclear material to Euratom until its safeguards agreement with the IAEA had been reached might have come to an end if Euratom had failed to agree on an arrangement with the IAEA.

The outcome of the negotiations between the two organisations was also rather important for third States, which were keen to find out how far the IAEA/Euratom agreement would be consistent with or applied in the same way as the other safeguards agreements. For example, the representative of Japan to the First Committee of the UN General Assembly at its 22nd resumed session in 1968 was reflecting a wide spread preoccupation when he stated that "it is the understanding of the Japanese Government that the peaceful nuclear activities of all non-nuclear-weapon States party to the treaty, including those which are at present under a regional safeguards system, will be subject to international safeguards of identical standards."<sup>121</sup> Some countries postponed their ratification of the NPT or lagged in negotiating the safeguards agreements with the IAEA awaiting the outcome of the IAEA/Euratom negotiations.

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<sup>121</sup> A/C.1/PV. 1565 (prov.), 10 May 1968, p. 36, Japan made it known that it expected to be treated in the same way as Euratom. Scheinman, "Euratom and the IAEA", p. 78.

At the end of 1973, Japan, for example, had not yet ratified the NPT and Sweden's safeguards agreement with the IAEA was still under negotiation, in spite of the fact that the Treaty was ratified by Sweden on 9 January 1970.

On 20 September 1971, the Council of Ministers of the European Communities gave the Commission a mandate to start negotiating with the IAEA. Negotiations began on 9 November 1971, and after seven rounds of negotiations a mutually agreeable text was reached in July 1972 by the five original non-nuclear-weapon States Members of Euratom, the IAEA and Euratom. In September 1972 the Agreement was approved by the Council of Ministers of the European Communities and, shortly thereafter, on 22 September, by the Board of Governors of the IAEA, meeting in Mexico City. It was finally signed in Brussels on 5 April 1973 by the IAEA, Euratom and all the seven non-nuclear-weapon States Members of the enlarged European Communities, i.e., the five original Members plus Denmark and Ireland.<sup>122</sup> The agreement entered into force on 22 February 1977 long after the ratification of the NPT by all the Parties to the agreement.

The delay in ratification was a breach of the deadline prescribed by Article III.4 of the NPT. It was due to the fact that the Communities were busy working out a new regulation on safeguards procedures to replace Regulations 7 and 8 which were agreed upon in 1959. The new Regulation was devised to take into account the new NPT system and the provisions of the IAEA/Euratom Agreement. The Regulation numbered 3227/76, came into force on 15 January 1977, a month before the entry into force of the IAEA/Euratom Agreement.<sup>123</sup>

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122 The Agreement and the Protocol attached to it are reproduced in IAEA Doc. INFCIRC/193, 14 Sept. 1973. It is reproduced in Appendix 24 I to this study.

123 Official Journal of the European Communities, Vol. 19, No. L 263, 31 Dec. 1976. See also the article by Hans W. Schleicher and Bernard V. Sharpe, "The Euratom Safeguards System as a Regional Control System" (IAEA-CN-36/434) in Nuclear Power and Its Fuel Cycle, Vol. 7, pp. 431-440.

Like all the other safeguards agreements negotiated with the States Party to the NPT, the IAEA/Euratom Agreement is based on the model safeguards agreement drafted by the Safeguards Committee, the so-called "blue book." However, there are several formal variations to take account of the requirements of this particular Agreement, especially the need to define the respective responsibilities of the Community and its Member States thereunder. Moreover, in order to amplify certain provisions of the Agreement, a Protocol has been elaborated and attached to the Agreement specifying in detail the way in which the Community will co-operate with the Agency in the application of safeguards within the territory of States Party to the Agreement, and the role that the Community will play, in co-operation with the Agency, in relation to the provision of information and reports and to inspections.

As the essential elements of the Agreement and the Protocol attached to it will be evoked in the course of the analysis undertaken below of the remaining aspects of Article III of the NPT and its implementation, we shall confine ourselves at this stage to the distinguishing features of the Agreement and the Protocol.<sup>124</sup> They are :

- Euratom, in spite of the fact that it is not a party to the NPT, is a party to the application of the safeguards required by Article III not only in its capacity as inspectorate but also as subject to the safeguards applied by the IAEA.

- Euratom maintains its present safeguards system. However, it has undertaken to make changes in its regulations and pro-

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<sup>124</sup> For brief analyses of the Agreement, see David A.V. Fischer, "IAEA/Euratom Agreement - An Explanation", IAEA Bulletin, Vol. 15, No. 3, June 1973, pp. 10-16 and Jan Gijssels, "Organisation de l'Europe. L'accord entre Euratom et l'AIEA en application du Traité sur la Non-Prolifération des Armes Nucléaires", Annuaire Français de Droit International, Vol. XVII, 1972, pp. 837-863.

cedures for the collection and evaluation of information on nuclear material in order to adapt them to the requirements of the IAEA under the Agreement.

- Euratom will carry out the preliminary checking and analysis of the information to be sent to the IAEA.

- The IAEA shall apply its safeguards in such a manner as to enable it to verify the findings of Euratom's system of safeguards. Verification extends, however, to the exercise of independent measurements and observations.

- As a result of the effectiveness and comprehensiveness of the safeguards applied by Euratom for more than a decade, the Agreement prescribes that the IAEA, in its verification, shall take due account of such effectiveness. In other words, the technical efficiency in the application of Euratom safeguards is an important factor in determining the degree and velocity of IAEA verifications.

- It is agreed by all the parties to the Agreement to avoid unnecessary duplication of safeguards activities.

- The territories of the seven non-nuclear-weapon States at present Members of the Community and Parties to the Agreement are treated as a single area for the purpose of the application of safeguards by the IAEA.

- The Protocol to the Agreement prescribes the establishment of a Liaison Committee of a technical character at the Secretariat level composed of representatives of the Community and the Agency. Its function is to carry out the Agreement, resolve any questions that may arise and keep estimates of routine inspection effort up to date.

With respect to the new Regulation on safeguards procedures, long and involved discussions had been necessary in order to achieve one of the important objectives, namely to establish a single and unique regulation applicable to the whole European Community, including the nuclear-weapon States, of which one had not even signed the NPT, and pre-

serving in this way a coherent and harmonized application of Euratom safeguards in all Member States.

The new Regulation means a considerable change in the safeguards procedures for the Commission of the European Communities and for the operators. In the planning and execution of inspections, the practical knowledge and experience of Euratom is placed at the disposal of IAEA in a collaborative manner for the designing and implementation of a harmonized operational programme.<sup>125</sup> A whole new concept has developed in the application of safeguards, the so-called joint inspection. Although the IAEA would still be able to draw from its safeguards activities independent conclusions, the newly developed concept is not exactly what the IAEA had anticipated in the application of NPT safeguards in the European Communities.

By mid-1979, 189 of the 214 nuclear installations in the non-nuclear-weapon States of Euratom were covered by facility attachments. In the remaining facilities, safeguards were implemented on the basis of ad hoc inspections and of reporting procedures which had been partly brought into line with the IAEA requirements. Negotiations to complete the facility attachments were continuing. As to the United Kingdom, the subsidiary arrangements to its nuclear installations not related to its national security, had been substantially agreed to.

At its face value, the Agreement and the new safeguards procedures appears to have struck a cautious balance between the IAEA's claim of universality in the application of safeguards and Communities' assertion of the comprehensiveness and effectiveness of its regional safeguards system. In view of the belated implementation of the Agreement, it may be a little early to make a comprehensive assessment of its effectiveness. The credibility of the Agreement as an effective means to ascertain that no nuclear material in the Euratom countries is diverted to nuclear weapons or other

125 Schleicher and Sharpe, loc. cit., pp. 5-8.

nuclear explosive devices can only be established in the light of future experience. Credibility would also need to be established in-so-far as ascertaining that equal opportunities in commercial competition between the Members of Euratom and the other equally advanced States are not affected by the Agreement. A case in point is Japan. Its safeguards agreement with the IAEA contains provisions similar to those in the IAEA/Euratom Agreement. Japan's State System of Accounting for and Control of Nuclear Material (SSAC) is as advanced as that of Euratom.

However, the Agreement is of great significance. It is the first agreement concluded between Euratom and an organization of the UN family. It is an event of a highly political nature whereby Euratom affirms itself as a political entity after a series of international setbacks and exterior hostility from the Soviet Union and its Eastern European allies. The Agreement may serve as a model for other aspirants to regional atomic integration.

Moreover, the Agreement would bring under NPT safeguards more than half the nuclear power plants that exist in non-nuclear-weapon States. It had triggered the implementation of the offer made by the United Kingdom as well as the offer made by France, the two nuclear-weapon States Members of the Communities. All these steps should give the NPT a new momentum and a near-universal character.

## II. The Purpose and Scope of Application of NPT Safeguards

According to paragraph 1 of Article III of the NPT, each non-nuclear-weapon State Party to the Treaty undertakes to accept safeguards "for the exclusive purpose of verification of the fulfilment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices." (Emphasis added.) Having thus defined the purpose of the safeguards required by the NPT, the same paragraph goes on to delimit the scope of application of safeguards beyond the

vague notion of peaceful uses of nuclear energy. The paragraph stipulates that :

"Procedures for the safeguards required by this article shall be followed with respect to source or special fissionable material, whether it is being produced, processed or used in any principal nuclear facility or is outside any such facility. The safeguards required by this article shall be applied on all source or special fissionable material in all peaceful nuclear activities within the territory of such State, under its jurisdiction, or carried out under its control anywhere." (Emphasis added.)

Accordingly, NPT safeguards are applied more precisely on all source or special fissionable material in all the peaceful nuclear activities of non-nuclear-weapon States Party to the NPT for the exclusive purpose of verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices. This has been clearly stated in paragraphs 1 and 2 of the model agreement on NPT safeguards (INFCIRC/153). Moreover, paragraph 28 of INFCIRC/153 defines the technical objective of NPT safeguards in the following terms :

"The Agreement should provide that the objective of safeguards is the timely detection of diversion of significant quantities of nuclear material from peaceful nuclear activities to the manufacture of nuclear weapons or of other nuclear explosive devices or for purposes unknown, and deterrence of such diversion by the risk of early detection."

On the basis of these provisions of the NPT and the model safeguards agreement, we shall proceed to a closer examination of the purpose and scope of application of NPT safeguards. The analysis undertaken here is confined to the general principles, without much involvement in the procedures prescribed for the implementation of those principles, which are the subject matter of part IV of this chapter.

### 1. The Purpose of NPT Safeguards

In defining the purpose of NPT safeguards, the above legal instruments make use of two terms which need in the first place



to be clarified, i.e., the terms "verification" and "diversion". Secondly, the limitations of the purpose so defined ought to be understood. Thirdly, the crucial factor of the timely or early detection of diversion of significant quantities of nuclear material will be dealt with.

(a) The concept of verification was introduced in anticipation of the arrangement which was worked out between Euratom and the IAEA whereby the latter, in applying its safeguards, would take account of the Community's safeguards system. Moreover, as will be shown below, the IAEA in applying its safeguards under the NPT should take due account of the technical effectiveness of the national accountancy and control systems of the States Party to the Treaty.<sup>126</sup>

With regard to the term "diversion", it should be noted that although it has been used frequently in the practice of the IAEA, it neither appears in the IAEA Statute nor in the safeguards document of 1968 (INFCIRC/66/Rev. 2). It was defined, however, in the first IAEA safeguards document of 1961 (INFCIRC/26) to mean any "use" of safeguarded items in violation of any condition of a safeguards agreement. The term appears in paragraph 1 of Article III of the NPT in the sense indicated in the 1961 safeguards document.<sup>127</sup>

(b) Although paragraph 1 of Article III prescribes at the outset that the acceptance of safeguards is "for the exclusive purpose of verification of the fulfilment of ... obligations assumed under this Treaty" (Emphasis added.), it immediately goes on to restrict the verification to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices.

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<sup>126</sup> See paras. 7 and 31 of INFCIRC/153.

<sup>127</sup> Paul C. Szasz, op.cit., p. 650 (note 400). The deliberate failure by a State to inform the IAEA of nuclear material in peaceful nuclear activities might also be considered to imply diversion. Such an eventuality would constitute a breach of the NPT but not of the safeguards agreement,

It follows that the NPT safeguards are not intended to verify compliance with the basic obligations in Articles I and II of the NPT relating to non-transfer and non-reception of nuclear weapons or other nuclear explosive devices.<sup>128</sup> If a nuclear-weapon State were to transfer a nuclear weapon to a non-nuclear-weapon State, it would be a violation of the NPT. However, no provisions are provided for in the NPT to guard against such a violation.<sup>129</sup> Moreover, the NPT safeguards are not intended to detect hidden nuclear weapons or clandestine production of such weapons.<sup>130</sup>

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128 At the ENDC, Romania submitted an amendment to paragraph 1 of Article III to replace the words "assumed under the Treaty" by the words "assumed under Articles I and II of this Treaty". Romania proposed to insert at the end of Article III a new paragraph worded as follows ;  
"The States Party to the Treaty agree to establish through the Security Council an appropriate control to ensure that non-nuclear-weapon States party to the Treaty on whose territory there are foreign military bases shall not acquire in any form whatsoever access to nuclear weapons indirectly through such bases." DCOR, Suppl. for 1967 and 1968, Doc. DC/230 and Add. 1, Ann. IV, Sec. 40 (ENDC/223/Rev. 1, 1 Mar. 1968).

The US representative at the ENDC refuted the latter proposal on the basis that the NPT was not designed to deal with defence relationships which did not involve proliferation of nuclear weapons. ENDC/PV. 378, 13 Mar. 1968, para. 20.

129 It is quite significant that in the UN debate in 1958 the United States objected to the first Irish draft resolution on the basis that it could not accept a non-transfer obligation the observance of which could not be verified, See Chapter 1, note 11.

130 The Treaty of Tlatelolco differs in this respect with the NPT. According to Article 12 of the Treaty, the control system shall be used for the purpose of verifying, inter alia, that none of the activities prohibited in Article 1 of the Treaty are carried out in the territory of the Contracting Parties with nuclear materials or weapons introduced from abroad. Article 16 of the Treaty provides for special inspections to verify compliance with the prohibited activities. See Appendix 8.

The NPT safeguards are also not intended to verify the non-use of nuclear material in military activities other than the manufacture of nuclear weapons or other nuclear explosive devices. Therefore, nuclear material may be used, for example, in the propulsion of nuclear submarines, nuclear electric generation in military satellites and portable nuclear power plants in remote military bases, without being subject to IAEA safeguards.<sup>131</sup>

With respect to this latter limitation, it should be pointed out that basic to all the safeguards agreements concluded with the IAEA prior to the NPT has been the undertaking, by the States subject to safeguards, that certain items "shall not be used in such a way as to further any military purpose".<sup>132</sup> (Emphasis added.) This undertaking is required by Article XI.F.4(a) of the IAEA Statute in all Agency Project Agreements,<sup>133</sup> and by paragraph 82 of the 1968 revised safeguards document (INFCIRC/66/Rev. 2) to be included in all types of safeguards agreements.

The question arose in the Safeguards Committee established by the IAEA whether the latter had the necessary authority

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<sup>131</sup> Ryukichi Imai, "Nuclear Safeguards," p. 4.

<sup>132</sup> Paul C. Szasz, op.cit., p. 568. IAEA Statute contains no definition of "military purpose". In drafting the Statute two restrictive definitions were proposed, the first of which defined any military purpose to mean "the production, testing or use of nuclear, thermo-nuclear or radiological weapons". The second stated that "(t)he only uses of atomic energy which shall be regarded as uses for non-peaceful purposes are military applications of the atomic explosion and of the toxicity of radioactive products." See McKnight, Atomic Safeguards, pp. 35-36.

<sup>133</sup> This specific requirement stems from the basic provisions of Articles II and III of the Statute relating to the objectives and functions of the Agency. Article III.A.5, for example, stipulates, inter alia, that safeguards in relation to Agency projects must be designed to ensure that certain items are not used in such a way as to further any military purpose.

under its Statute to conclude agreements of the type referred to in Article III.1 of the NPT, i.e., agreements which verify the non-diversion of nuclear material from peaceful uses to nuclear weapons and other nuclear explosive devices only. The IAEA confirmed its authority in explaining that Article III.A.5 of the Statute did not state that the safeguards to be applied "at the request of the parties, to any bilateral or multilateral arrangement, or at the request of a State, to any of that State's activities in the field of atomic energy", must be designed to achieve the same objective as the safeguards to be applied to Agency projects. The fact that the safeguards objective in Safeguards Transfer Agreements and agreements concluded at the unilateral request of a State had coincided with that in Project Agreements was a consequence of the relevant undertaking in the Co-operation Agreements or of the terms of the request made to the Agency, but was not a mandatory consequence of the Statute.<sup>134</sup>

In formulating the model NPT safeguards agreement (INFCIRC/153), certain limitations were imposed on the use of nuclear material in non-proscribed military activities.

In accordance with paragraph 14 of INFCIRC/153, the State which intends to use nuclear material in a non-proscribed military activity may do so if this activity will not be in conflict with a prior undertaking by the State, in which case

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<sup>134</sup> With respect to the safeguards agreements required by the Treaty of Tlatelolco, it is interesting to note that Mexico, which was already party to several Project Agreements, did not object to including the IAEA's standard undertaking in its safeguards agreement relating to this Treaty. INFCIRC/118, 23 Sept. 1968, Sections 2 and 3. However, in the subsequent safeguards agreement concluded in connection with both the Treaty of Tlatelolco and the NPT, Mexico undertook to accept safeguards for the exclusive purpose of verifying that nuclear material would not be diverted to nuclear weapons or other nuclear explosive devices. INFCIRC/197, 13 Dec. 1973, Article 1. Other Contracting Parties to the Treaty of Tlatelolco concluded similar agreements.

Agency safeguards apply. The Agency must be informed of the reason and of the approximate duration of the removal of the material from the safeguarded peaceful activities. Included must be an indication of the nature of activity in which the material is to be used and a written assurance that the material will not contribute to the production of nuclear weapons or explosive devices. If those conditions are met, the IAEA will suspend safeguards for the specified material after arranging with the State procedures for keeping the Agency advised of its quantity and composition throughout the unsafeguarded period. The application of safeguards will be resumed as soon as the material is returned to peaceful nuclear activities.

Moreover, in case the application of IAEA safeguards under previous safeguards agreements are suspended by virtue of the safeguards agreement concluded under the NPT, paragraph 24 of INFCIRC/153 provides that if the State has received assistance from the Agency for a project, the State's undertaking in the Project Agreement not to use items subject thereto in such a way as to further any military purpose shall continue to apply.<sup>135</sup>

These provisions regulating the use of nuclear material in non-proscribed military activities are quite pertinent. They aim at preserving the integrity of prior undertakings in respect of which IAEA safeguards apply, especially with regard to the undertakings in Project Agreements not to use items subject thereto in such a way as to further any military purpose. Preserving the integrity of the latter undertakings is particularly imperative in order not to contravene the provisions of the Statute of the IAEA relating to Project Agreements. Above all, they close a serious loop-hole in Article III

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<sup>135</sup> See, for example, Article 23(b) of the IAEA/Euratom Agreement. INFCIRC/193, 14 Sept. 1973, p. 8.

of the NPT, a loop-hole which would have permitted a Party to the Treaty aspiring for a nuclear-weapon capability to avoid IAEA safeguards by pretending that the nuclear material it possessed was used in military activities not connected with the manufacture of nuclear explosives.

(c) The ultimate objective of the application of NPT safeguards is the timely or early detection of diversion of significant quantities of nuclear material. Safeguards are not devised to prevent by physical action the diversion of nuclear material, as the words "preventing diversion" in Article III.1 of the NPT may give the impression that they do. The Safeguards' objective is to deter diversion by the risk of early detection. There is no assurance that diversion will be prevented from taking place.<sup>136</sup> If significant quantities of nuclear material are reported missing, the safeguards system cannot prove that nuclear weapons are being manufactured. The State concerned would be given the opportunity to explain the loss of material and procedures would be set in motion to inquire into the case, as will be shown under part V of this chapter.

The two elements of quantity and time are crucial in measuring and detecting diversion. Taking into account these two elements, the NPT safeguards system has introduced the concept of statistical analysis as a basic tool of the system.<sup>137</sup> This is explained as follows :

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136 Mason Willrich notes that safeguards are more analogous to observation satellites which provide information concerning the build up of a potential adversary's strategic nuclear forces than to an international inspection system associated with a disarmament scheme. Mason Willrich, "Civil Nuclear Power : Conflict Potential and Management" in Black and Falk (Eds.), The Future of International Legal Order (Vol. III). Conflict Management, pp. 268-269.

137 See W. Häfele, "Systems Analysis in Safeguards of Nuclear Material" (A/CONF.49/P/771 : Invited review paper) in Peaceful Uses of Atomic Energy, Vol. 9, pp. 303-322.

With regard to the quantitative element, the diverted quantity has to be significant.<sup>138</sup> For example, when uranium and plutonium are separated in a chemical processing plant, there are always losses. Either because of errors in measuring instruments or because of high radiation and the physical inaccessibility of the material itself, it is not uncommon for many kilogrammes of fissionable material to remain unaccounted for. If all loss of material due to natural causes had to be reported as grounds for suspicion of diversion, no country would be free from suspicion. If, on the other hand, a certain amount of operational loss of material is thought acceptable, there may be some who will disguise genuine diversion as operational loss. Some method of computing statistically a range of acceptable uncertainties for different types of nuclear activities is therefore essential. The technical means for testing the amount of material unaccounted for (MUF) against these criteria is also a statistical technique.<sup>139</sup>

As to the time element, the problem is how early a diversion may be detected. The time element is usually taken care of through what is referred to as critical time. Critical time is defined as the length of time necessary for raw material to become a nuclear weapon, and it varies from material to material. If diversion is effectively detected within the critical time of the material involved, this will be sufficiently early for the purposes of the safeguards system. Here too a material-accountability analysis is considered to be a far more reliable tool of the safeguards system than inspection.<sup>140</sup>

138 W. Häfele notes that by the word "significant" a vast number of academic considerations on milligrams which one loses track of are discarded. Ibid., p. 309.

139 Ryukichi Imai, "Nuclear Safeguards," p. 12. "Material unaccounted for," as defined in INFCIRC/153, means the difference between book inventory and physical inventory. For the definition of the two terms underlined, see paras. 102 and 113 of INFCIRC/153.

140 Ryukichi Imai, "Nuclear Safeguards," p. 13.

In 1978, the IAEA, as in previous years, did not detect any anomaly which would indicate the diversion of a significant amount of safeguarded nuclear material for the manufacture of any nuclear weapon, or to further any other military purpose, or for the manufacture of any other nuclear explosive device.

(d) Because of the limited objective of the application of NPT safeguards, international attention has recently focussed on physical protection of nuclear material. Some physical protection and safeguards measures may in fact overlap, such as containment and surveillance, two basic features of the NPT safeguards system that will be evoked later in this chapter.

Protection against acts of sabotage, terrorism and theft is essentially the duty of the State on whose Territory the nuclear facilities and nuclear materials are located. However, international co-operation on this issue is needed and useful, especially when nuclear material is being transported from one country to another.

The publicized cases of the missing 200 pounds of highly enriched uranium from a small processing plant in Appollo, Pennsylvania in 1965; the disappearance of 200 tons of uranium ore shipped by sea in November 1968; and the sabotage of a French plant constructing two nuclear research reactors for Iraq in April 1979 for all of which Israel was believed to be responsible are vivid examples of the necessity of tight measures of physical protection.<sup>141</sup>

In its Final Declaration, the 1975 NPT Review Conference urged that action be pursued to elaborate further, within the IAEA, concrete recommendations for the physical protection of nuclear material in use, storage and transit, including principles relating to the responsibility of States,

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<sup>141</sup> See The New York Times, 3 May 1977, 26 Feb. 1978 and 23 Dec. 1979; The Washington Post, 28 Jan. and 26 Feb. 1978 and 7 Apr. 1979; Rolling Stone, 1 Dec. 1979; and The Atlantic, Vol. 243, No. 4, April 1979.



with a view of ensuring a uniform, minimum level of effective protection for such material.

The Conference called upon all States engaging in peaceful nuclear activities to enter into such international agreements and arrangements as might be necessary to ensure such protection, and in the framework of their respective physical protection systems, to give the earliest possible effective application to the IAEA's recommendations.

In 1972, the IAEA had already contributed to this issue by formulating recommendations for the attention of all Member States. They were reviewed and reissued twice, in September 1975 and June 1977. The "Guidelines for Nuclear Transfers" of the London Group made available early in 1978, also call for agreement between suppliers and recipients on levels of physical protection, and define minimum levels to be applied.

It is beyond the scope of this chapter to indulge in an analysis of IAEA recommendations.<sup>142</sup> We shall rather concentrate briefly on the more concrete objective of concluding an international convention on the physical protection of nuclear material. The IAEA itself favoured such an agreement, as can be deduced from its recommendations.

The first to suggest an international convention was US Secretary of State Henry Kissinger before the UN General Assembly in 1974 and 1975. In February 1976, the US began informal consultations with a number of Governments on a draft of a convention which it had prepared. On 16 June 1977, the IAEA circulated the draft to all Members of the

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<sup>142</sup> See IAEA Doc. INFCIRC/225 Rev. 1, June 1977. For brief analyses of the evolution of IAEA recommendations, see the two articles by Wojciech Morawiecki, "IAEA's Approaches to Physical Protection of Nuclear Materials" and "The IAEA's Role in Promoting Physical Protection of Nuclear Material and Facilities" in IAEA Bulletin, Vol. 18, No. 1, Feb. 1976, pp. 25-28 and Vol. 20, No. 3, June 1978, pp. 39-45 respectively.

IAEA. In October 1977 the IAEA General Conference supported the efforts underway to draft a convention.

Subsequently, a number of meetings of government representatives were convened in Vienna to consider the drafting of the convention. In a last meeting attended by 58 States between 15 and 26 October 1979, the consideration of a convention was completed, the text of which is attached as Appendix 25 to this Study. It will be opened for signature as of 3 March 1980 at the IAEA in Vienna and at the UN in New York.

During the negotiations the United States and other nuclear-weapon States were in favour of the convention being applied to all nuclear facilities, nuclear materials and, nuclear transports, other than those facilities, materials, or transports used for military purposes. Many countries argued that domestic physical protection obligations should not be included in the convention. They believed that the convention should be limited primarily to international transport of nuclear material.

A compromise was reached to the effect that the convention would concern the international transport of nuclear material, but that the importance of the physical protection of nuclear material in domestic use, storage and transport would be referred to in the preamble. The provisions on mutual cooperation and assistance in the protection and recovery of nuclear material, the penal provisions, and the provisions on extradition and jurisdiction would also apply to nuclear material in domestic use, storage and transport. Moreover, within five years after the convention enters into force, a review conference would be held for the purpose of evaluating the implementation of the convention and considering the extension of its scope.

Each State Party would agree not to export nuclear material unless it had assured itself that such material would be protected during international transport at levels defined in the two annexes. Further, each State Party would

agree not to import nuclear material from a state not party to the convention unless it had assured itself that such material would be protected at such levels during international transport.

Article 5 of the draft convention would require states parties to designate officials or offices responsible for physical protection of nuclear material and for coordinating recovery and response operations in the event of any unauthorized removal, use or alteration of nuclear material.

Article 6 contains a listing of offenses that states parties would be obligated to make punishable under their internal laws.

Articles 7 through 13 of the convention contain provisions akin to those in the Hague hijacking convention, the Montreal sabotage convention, and the U.N. protection of diplomats convention.

Articles 14 through 18 concern signature, ratification, and other technical matters, including a provision for the review conference.

## 2. The Scope of Application of NPT Safeguards

As can be deduced from the above analysis, nuclear material is the direct object of NPT safeguards. The NPT system follows and measures (or verifies measurements of) the flow of nuclear material in non-nuclear-weapon States, not only within nuclear facilities but also from one facility to another within each of these States or between two or more of these States. The system looks at the entirety of the State's peaceful nuclear activities and not at isolated individual facilities.

In determining the scope of application of NPT safeguards, we shall define "nuclear material", explain its choice as the direct object of safeguards, delimit its location and flow in the nuclear fuel cycle and lastly explain the circumstances in which safeguards on nuclear material are terminated or not applied at all.

(a) In the text of Article III of the NPT, the term "nuclear material" is used interchangeably with the term "source or special fissionable material." In the model NPT safeguards agreement (INFCIRC/153), the term "nuclear materials" is dominantly used and for this a definition is provided in paragraph 112 as follows:

"'Nuclear material' means any source or any special fissionable material as defined in Article XX of the Statute. The term source material shall not be interpreted as applying to ore or to ore residue. Any determination by the Board under Article XX of the Statute after the entry into force of this Agreement which adds to the materials considered to be source material or special fissionable material shall have effect under this Agreement only upon acceptance by the State." (Emphasis added.)

Since Article XX of the IAEA Statute has already been referred to in this study, and since the latter part of the definition is self-explanatory (although it should be pointed out that the previous definition of nuclear material in INFCIRC/66/Rev. 2 does not include a similar provision), we shall confine our remarks here to the underlined portion of the definition.

This portion of the definition means, as clearly put by paragraph 33 of INFCIRC/153, that "safeguards shall not apply... to material in mining or ore processing activities." This is a great success for the point of view of uranium producing countries such as Australia and the Union of South Africa.<sup>143</sup> The application of IAEA safeguards on such source material is considered by these countries as unnecessary and burdensome. Although the IAEA has never applied safeguards on uranium mines and ore refining facilities,<sup>144</sup> South Africa, for example,

143 A/C.1/PV. 1570 (prov.), 17 May 1968, p. 12 (Australia) and A/C.1/PV. 1571 (prov.), 20 May 1968, pp. 56-58 (South Africa).

144 Paragraph 78 of INFCIRC/66/Rev. 2 excludes mine or ore-processing plant from the definition of "principal nuclear facility", which is subject to the safeguards prescribed in this document.

feared that the Agency might some day wish to safeguard uranium mines, and indeed even gold mines producing uranium as a byproduct.<sup>145</sup>

Moreover, some countries either expressed the view that safeguards should not be unreasonably extended to areas which did not themselves entail the risk of proliferation of nuclear weapons,<sup>146</sup> or proposed more particularly that safeguards should be limited to highly enriched uranium and plutonium, on the basis that these materials are the only materials suited for the manufacture of nuclear weapons.<sup>147</sup>

The latter proposal had been extensively discussed by the IAEA working group on the safeguards system early in 1968 in connexion with the safeguards for plants producing fuel elements and converting nuclear materials. The working group had agreed that if that proposal was adopted, it would be possible

145 A/C.1/PV. 1571 (prov.), 20 May 1968, pp. 56-58. The qualified approval of the safeguards agreement which was concluded in September 1968 between Mexico and the IAEA in connection with the Treaty of Tlatelolco substantiated, in fact, the fear voiced by South Africa. The agreement specified, in a clause which the IAEA Board of Governors agreed should not constitute a precedent, that "'Nuclear material' shall mean any source or special fissionable material as defined in Article XX of the Statute, except source material in the form of ore." Paul C. Szasz, op. cit., p. 646 (note 304).

146 For example, see ENDC/PV. 376, 11 Mar. 1968, paras. 10-11 and A/C.1/PV. 1572, 22 May 1968, para. 130 (Romania).

147 For example, see ENDC/PV. 223, 12 Aug. 1965, pp. 19-20 and ENDC/PV. 334, 28 Sept. 1967, paras. 39-40 (India); A/C.1/PV. 1575, 28 May 1968, para. 26 (Malta); and A/CONF.35/C.1/SR.13, 19 Sept. 1968, pp. 79-80 (Switzerland). The latter country even introduced a draft resolution to the Conference of Non-Nuclear-Weapon States which recommended, inter alia, the simplification of safeguards procedures by limiting them to the flow of highly enriched uranium and plutonium. A/CONF.35/C.1/L.2, 13 Sept. 1968. That specific recommendation, which was later included in another joint draft resolution (A/CONF.35/C.1/L.14, 24 Sept. 1968) was rejected by Committee One of the Conference. A/CONF.35/5, 26 Sept. 1968, para. 4.

for natural uranium to be diverted from its proper use. In an atomic reactor using natural uranium, it is not possible to establish reliably how much plutonium has been produced unless it can be established how much natural uranium is going in.<sup>148</sup> Likewise, in order to establish the quantities of fissionable material in a reprocessing plant, it is necessary to measure the spent-fuel elements of reactors.

(b) The choice of nuclear material as the direct object of NPT safeguards was a dramatic shift from the IAEA older safeguards systems which were "plant oriented", i.e. focussing on individual plants. The first safeguards system of 1961 was devised for reactors of less than 100 thermal megawatts. The system was extended in 1964 to cover large reactor facilities. It was revised in 1965 and provisionally extended in 1966 to include additional provisions for reprocessing plants. In 1968, it was also provisionally extended to include further additional provisions for safeguarded nuclear material in conversion plants and fabrication plants.<sup>149</sup>

The "plant orientation" of the older systems was reflected in the special procedures which were drawn up for each different kind of plant. Moreover, the design of any plant had to be reviewed well before it began to operate, reports might be required during the construction of the plant and an initial inspection would normally be made before operation started.<sup>150</sup>

The reasons for this dramatic shift from a system "plant oriented" to a system "material oriented" were manifold. The

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148 A/CONF.35/C.1/SR.19, 24 Sept. 1968, p. 137 (IAEA's representative). As also explained by one scientist, some controls on source materials are extremely useful, since they provide the means of maintaining a material balance throughout the entire nuclear fuel cycle. Herbert Scoville, Jr., "Technical Capabilities of Safeguards" in Boskey and Willrich (Eds.), op.cit., p. 54.

149 See INFCIRC/66/Rev. 2, 16 Sept. 1968, p. 1.

150 "Safeguards - Old and New", p. 25.

safeguards system of Euratom, a "material oriented" system, was to be maintained and accommodated within the NPT safeguards system. Members of Euratom were particularly concerned about the possible risks of industrial espionage in a "plant oriented" system. Moreover, as the IAEA was to be responsible for the application of safeguards on the entire nuclear fuel cycle in an unprecedented number of non-nuclear-weapon States and possibly in nuclear-weapon States (the US and UK offers), a plant oriented system was no longer feasible in terms of manpower, finance and above all effectiveness. As a result of intense international discussions and co-operation, it was already possible to build up an effective international safeguards system which would make use of statistical analysis of safeguarded nuclear material as a basic tool of safeguards.<sup>151</sup>

(c) In determining the location and flow of safeguarded nuclear material, the provisions of the latter part of Article III.1 should first be recalled. Safeguards apply to all source or special fissionable material in all peaceful nuclear activities, whether the nuclear material is being produced, processed or used in any principal nuclear facility or is outside any such facility. Safeguards apply to the nuclear material in these activities whether they are taking place within the territory of a non-nuclear-weapon State party to the NPT, under its jurisdiction or carried out under its control anywhere.

The use of the phrase "all peaceful nuclear activities" is intended to cover all places and all activities where source or special fissionable material employed for peaceful purposes is located.<sup>152</sup> Article III mentions more precisely the location as any principal nuclear facility or any place outside any such facility. The phrase "whether they are being produced,

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<sup>151</sup> See W. Häfele, "Systems Analysis in Safeguards of Nuclear Material".

<sup>152</sup> ENDC/PV. 368, 21 Feb. 1968, para. 35 (US).

processed or used in any principal nuclear facility or is outside any such facility" is derived directly from paragraph 29 of the IAEA safeguards document of 1966 (INFCIRC/66/Rev. 1). It is quite significant, however, that the second half of paragraph 29, which prescribes that safeguards procedures also extend to facilities that contain or that will contain nuclear material, is dropped in Article III. The inclusion of only the first part of paragraph 29 in Article III appeared to have been made at the request of the Federal Republic of Germany, which was not in favour of a "plant oriented" safeguards system.<sup>153</sup>

The phrase "principal nuclear facility" is defined in paragraph 78 of each of the safeguards documents of 1966 and 1968 (INFCIRC/66/Rev. 1 and Rev. 2). Paragraph 106 of the NPT safeguards model agreement (INFCIRC/153) uses the term "facility", which means :

- "(a) A reactor, a critical facility, a conversion plant, a fabrication plant, an isotope separation plant or a separate storage installation; or
- (b) Any location where nuclear material in amounts greater than one effective kilogram is customarily used."<sup>154</sup>

This definition is different from the previous definitions in many respects. It is comprehensive and definitive. It does not explicitly except mines and ore-processing plants as in the previous definitions, since the new definition of nuclear material interprets source material as not applying to ore or ore residue. Paragraph (b) is an innovation. Practically, it stands for the previous term "outside any such facility". If the nuclear material does not exceed the one kilogram, it may be exempted from safeguards as will be shown below.

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<sup>153</sup> See McKnight, Nuclear Non-Proliferation, pp. 73-74.

<sup>154</sup> For the definition of the other terms, see the glossary in Appendix 27.



Another phrase in Article III-1 in need of explanation is "under its jurisdiction or carried out under its control anywhere". Apparently, it is intended to remove possible loopholes, such as allowing a signatory to arrange for the processing of natural uranium it owned in some non-signatory State, and thus to acquire nuclear explosives.<sup>155</sup>

Turning to the precise stage at which safeguards should be applied to the source or special fissionable material "produced, processed or used",<sup>156</sup> a diagram of the existing uranium/plutonium fuel cycle is introduced in the following page for the purpose of clarification.<sup>157</sup>

NPT safeguards begin at the point where nuclear material is of both suitable composition and purity to be enriched in an isotope separation plant (point a in the diagram), or to be fabricated into fuel elements (point b). This point may be as the material leaves a particular facility or as it leaves a particular stage within a facility. The type of plant is not determinant; it is the composition and purity of the material which govern the starting point of safeguards.<sup>158</sup> Safeguards also begin when nuclear material suitable for enrichment or fuel fabrication, or any other nuclear material produced at a later stage in the nuclear fuel cycle, is imported into the State.<sup>159</sup>

Therefore, any material which has not reached the stage where it is suitable for enrichment or fuel fabrication is not subject to safeguards, unless the material is exported or im-

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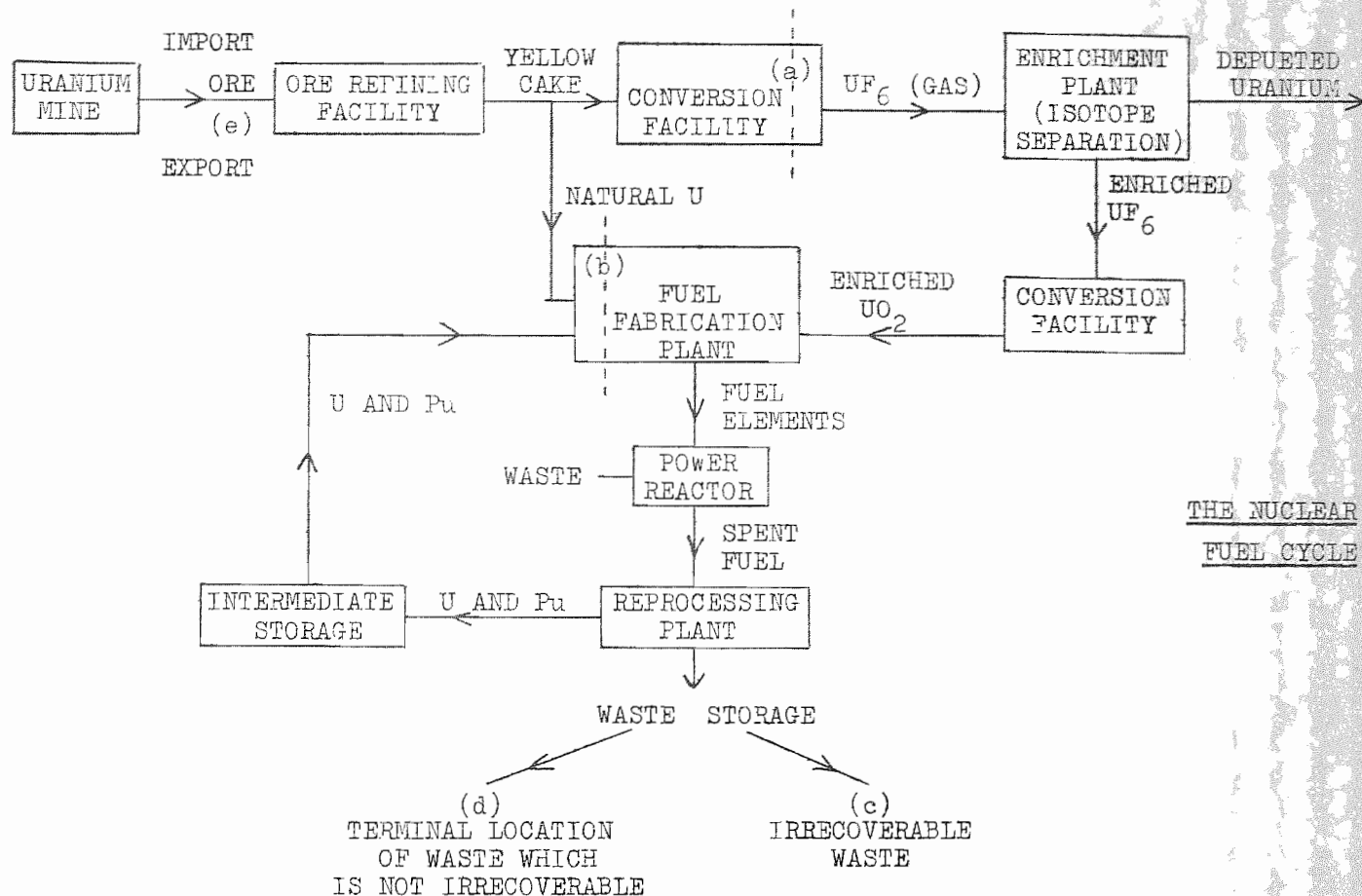
155 E.L.M. Burns, "The Nonproliferation Treaty", p. 800.

156 For the meaning of the words produced, processed and used, see Paul C. Szasz, op.cit., pp. 588-589.

157 The Diagram is reproduced from Safeguards (Vienna : IAEA, 1972 (?)), figure 6, p. 18.

158 Ibid., p. 19. See para. 34(c) of INFCIRC/153.

159 Ibid.



THE NUCLEAR  
FUEL CYCLE

ported (such as that shipped to or from point e in the diagram). In the latter case, however, the State shall merely inform the IAEA of the quantity and composition of the nuclear material, unless it is to be used for specifically non-nuclear purposes, such as the production of alloys and ceramics.<sup>160</sup>

The definition of the starting point of safeguards more precisely and realistically is one of the most significant elements of the new safeguards system.

(d) A point has also to be identified where safeguards terminate in the nuclear fuel cycle. Nuclear material may be diluted to the point at which it is no longer feasible to recover from it any materials which could be generated through the enrichment or fuel fabrication stages. In such a case (point c in the diagram) safeguards terminate when that level of dilution has been reached. Or, the extent of dilution may be such that recovery is not entirely impossible, yet the material disposition authority has no intention of attempting to recover the material (such as point d). Such material is not irrecoverable; but the IAEA does not insist on maintaining the full range of safeguards measures on material in terminal storage. In this case consultation between the Agency and the State will determine the appropriate safeguards to be maintained.<sup>161</sup>

The new system, as the old one, provides for exemptions from safeguards. Apart from the few exemptions discussed above, namely the use of nuclear material in a non-proscribed military activity or in a non-nuclear activity and material in mining or ore processing activities, INFCIRC/153 provides in its paragraphs 36 and 37 two categories of exemptions. In the first category, nuclear material may be exempted either be-

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<sup>160</sup> Ibid., para. 34(a) and (b).

<sup>161</sup> Safeguards, p. 19. See paras. 11, 13 and 35 of INFCIRC/153.

cause of its small quantities, or the kind of activities in which it is used or the high percentage of non-fissionable material it contains (paragraph 36). In the second category, nuclear material, most of which satisfies the purity and composition conditions for safeguard coverage, may nonetheless be exempted within prefixed ceilings (paragraph 37). The amounts of nuclear material exempted are insignificant for the manufacture of nuclear explosives. The exemptions have to be requested by the States.<sup>162</sup>

### III. The Balance of Basic Obligations and Rights

The reciprocal obligations and rights of the parties to the application of NPT safeguards, whether States or safeguarding authorities, can be divided into three separate but closely-linked sets. They are the acceptance of safeguards, as set forth in an agreement (Article III-1 and 4); the non-transfer of nuclear material to non-nuclear-weapon States unless the nuclear material is subject to safeguards (Article III-2); and the implementation of safeguards in a manner designed to avoid hampering the economic and technological development of the Parties to the NPT or international co-operation in the field of peaceful nuclear activities (Article III-3).

#### 1. The Acceptance of Safeguards as Set Forth in an Agreement (Article III-1 and 4)

Each non-nuclear weapon State party to the NPT has to accept IAEA safeguards, as set forth in an agreement to be negotiated and concluded with the IAEA within certain time limits.

The application of safeguards is not automatic. The State has to take the initiative and seek the Agency in order to negotiate and conclude a safeguards agreement.

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<sup>162</sup> For a summary of the exemptions, see the diagram prepared by the IAEA in Safeguards, pp. 19-20. Since Euratom's safeguards system does not allow for exemptions, it is quite improbable that the Community will avail itself of these exemptions.

Since the IAEA is not a party to the NPT, the safeguards agreement constitutes a self-contained legal instrument whereby the State undertakes to accept IAEA safeguards and the Agency exercises the right and obligation to ensure that safeguards will be applied.<sup>163</sup> The NPT safeguards model agreement also provides that the Agency and the State shall co-operate to facilitate the implementation of the safeguards provided for therein.<sup>164</sup>

The State is under the obligation to seek the conclusion of the safeguards agreement, even if it has no nuclear material within its territory or under its jurisdiction or control anywhere. In these cases, a protocol is attached to the safeguards agreement providing that the implementation of safeguards under the agreement will be held in abeyance until such time as the State has nuclear material in quantities exceeding the specified limits of exemptions.<sup>165</sup>

The safeguards agreement has to be concluded within a certain time limit. The second part of Article III-4 provides that :

"Negotiation of such agreements shall commence within 180 days from the original entry into force of this Treaty. For States depositing their instruments of ratification or accession after the 180-

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163 See INFCIRC/153, paras. 1 and 2. The "agreement" as the instrument through which safeguards are accepted and applied appears to have prompted the several Romanian amendments to Article III, which aimed at replacing, for example, the words "safeguards required by this article" by "safeguards stipulated in the aforesaid agreement". See DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 40 (ENDC/223/Rev. 1, 1 Mar. 1968).

164 INFCIRC/153, para. 3. According to para. 3 of the IAEA/Euratom Agreement, it is the Community as a Party to the Agreement which undertakes, in applying its safeguards, to co-operate with the Agency. INFCIRC/193, 14 Sept. 1973.

165 For example, see the Protocol attached to the safeguards agreement concluded between the IAEA and Malaysia. IAEA Doc. INFCIRC/182, 18 May 1973.

day period, negotiation of such agreements shall commence not later than the date of such deposit. Such agreements shall enter into force not later than eighteen months after the date of initiation of negotiations."<sup>166</sup>

These deadlines have not always been met by the Parties to the NPT. Some countries have avoided them altogether by negotiating and concluding the safeguards agreements before ratifying the Treaty. As already mentioned, such a course has been followed by the non-nuclear-weapon States Members of Euratom.<sup>167</sup>

Not all the delays in meeting the deadlines should be criticised. It should be recalled that the Safeguards Committee of the IAEA accomplished its mission in drafting the model NPT safeguards agreement on March 1971. No State would have been able to commence negotiations before that date.<sup>168</sup> Therefore, the deadlines for negotiating and concluding the safeguards agreement should, in our view, start from that date and not from the date of the original entry into force of the NPT (5 March 1970). The deadlines based on the latter date seem to have been calculated on the assumption that the then existing IAEA safeguards system would apply.

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166 These provisions are similar to those of Article 13 of the Treaty of Tlatelolco. The 18-month period was considered by the US Department of State to be sufficient in light of the experience which the IAEA had had in negotiating many earlier safeguards agreements. Hearings on NPT, 1968, p. 49.

167 It is quite significant that the two-year period prescribed by Article III-4 (180 days + 18 months) was considered by the United States an adequate time for the IAEA and Euratom to get together. Hearings on Arms Control, 1968, p. 197 (Adrian Fisher).

168 For example, most of the Contracting Parties of the Treaty of Tlatelolco were technically in default on the deadlines prescribed by Article 13. Most of them were Parties to the NPT awaiting the outcome of the discussions taking place in the Safeguards Committee. See Hearings on Additional Protocol II, p. 43.

The States which fail to meet the deadlines of Article III obviously commit a breach of obligation under the NPT. However, no serious problems seem to have arisen because of delays in meeting these deadlines. Several States were known to have been waiting for the outcome of the negotiations carried out between the IAEA and other States and, more particularly, the IAEA/Euratom negotiations, in order to conclude their own safeguards agreements with the Agency.

Once the safeguards agreement is concluded it enters into force on the date on which the IAEA receives from the State written notification that the statutory and constitutional requirements for entry into force have been met. It remains in force as long as the State is Party to the NPT.<sup>169</sup>

## 2. The Transfer of Nuclear Material Under Safeguards

Article III-2 stipulates that :

"Each State Party to the Treaty undertakes not to provide : (a) source or special fissionable material, or (b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by this article."

In analysing this basic obligation, we have to distinguish between the transfers to non-nuclear-weapon States Party to the NPT and the transfers to non-nuclear-weapon States not party to it. Moreover, the fact that Article III-2 does not apply to the transfers to nuclear-weapon States ought to be briefly scrutinised in this context.<sup>170</sup>

### (a) The Transfers to Non-Nuclear-Weapon States Party to the NPT

The NPT safeguards model agreement (INFCIRC/153) includes

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<sup>169</sup> INFCIRC/153, paras. 25-26. This document also provides for amendments in its paragraph 23.

<sup>170</sup> This aspect has already been referred to under part I above.

specific provisions on international transfers, provisions which are applicable to all international transactions between non-nuclear-weapon States Party to the NPT (paragraphs 91-97). In principle, there should be no obstacle in applying these provisions to the exports of nuclear-weapon States to the non-nuclear-weapon States Party to the NPT.

Under INFCIRC/153 the export of nuclear material from a non-nuclear-weapon State is no longer dependent in any way on the prior consent of the IAEA. It is, however, the exporting State's responsibility to itself and to other Parties to the NPT, to ensure that the exported nuclear material remains under safeguards in the importing non-nuclear-weapon State. Likewise, the latter must subject its imports to safeguards.

Advance notifications to the IAEA are required on all transfers of nuclear material. The purpose of these notifications is to enable the Agency to carry out ad hoc inspections. To be more specific, in case the nuclear material is exported, the advance notification would enable the Agency if necessary to identify, and if possible verify the quantity and composition of the exported nuclear material and, if the Agency so wishes or the State so requests, to affix seals to the nuclear material when it has been prepared for shipping. Conversely, in case nuclear material is imported, the advance notification would enable the Agency if necessary to identify, and if possible verify the quantity and composition of the imported nuclear material, by means of inspection of the consignment at the time it is unpacked.<sup>171</sup>

The IAEA/Euratom Agreement provides some exceptions to the above requirements. Since the territories of States Party to the Agreement are treated as a single area thereunder, no advance notifications are required of transfers of nuclear

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171 For a summary of the requirements and procedures for transfers under the NPT, see the diagram in the IAEA pamphlet Safeguards, figure 11, p. 33.



material between such States nor are ad hoc inspections required in relation thereto. Furthermore, account is taken of the fact that a common market has been established within the Community which provides for the unrestricted movement of nuclear material among all Members thereof. Consequently, there will not be ad hoc inspections in relation to transfers between the Parties to the Agreement and the Members of the Community which are not parties to the NPT.<sup>172</sup>

The IAEA safeguards systems (old and new) do not assign a role to the Agency for securing physically the nuclear material during transportation from one destination to another. Physical security is the responsibility of the individual national Government. There is universal agreement on this point.<sup>173</sup> Paragraph 91 of INFCIRC/153 confirms this rule and provides that the States concerned shall make suitable arrangements to determine the point at which the transfer of responsibility will take place.

However, there seems to be emerging a practice, and on the part of the IAEA, a trend toward inserting into its safeguards agreements special provisions on physical protection directly or indirectly related to the recommendations of the IAEA.

The recent conclusion of The Convention on the Physical Protection of Nuclear Material, which is mainly concerned with the international transport of nuclear material, will certainly fill a greatly felt gap in the overall system of safeguards.

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172 Compare the provisions of Articles 93 and 96 of the IAEA/Euratom Agreement (INFCIRC/193) with paragraphs 93 and 96 of INFCIRC/153.

173 Ryukichi Imai, "Nuclear Safeguards", p. 18. Imai evokes the possibility of establishing an internationally sponsored system of armed convoys for all transfer of nuclear material either internationally or domestically within non-nuclear-weapon States.

(b) The Transfers to Non-Nuclear-Weapon States not Party to the NPT

The application of safeguards on transfers to non-nuclear-weapon States not party to the NPT was the least that could be done to lessen the gap between these States and the States Party to the NPT. As rightly noted by one analyst, the provisions of Article III in this respect, together with the corresponding provisions in Articles I and II of the NPT, make the Treaty an international scheme for co-operative prevention of nuclear proliferation, rather than a treaty for individual abstentions from the nuclear option.<sup>174</sup>

The safeguards required on transfers to these States apply only to the nuclear material or equipment transferred, and not to all their peaceful nuclear activities required of the States Party to the NPT.<sup>175</sup> Therefore, in concluding the individual safeguards agreements with these States, it is the old safeguards system (INFCIRC/66/Rev. 2) which operates. This explains the insertion of the phrase "equipment or material especially designed or prepared for the processing, use or production of special fissionable material" in the second paragraph of Article III. However, the main object of safeguards is not such "equipment or material" but the nuclear material processed, used or produced as a result of such "equipment or material". For example, in a State not party to the NPT which is self-sufficient in uranium but needs to import equipment to build reactors and reprocessing plants, the safeguards required by Article III-2 will ensure that the plutonium produced as a re-

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174 J. Prawitz, "Arguments for Extended NPT Safeguards" in Nuclear Proliferation Problems (Preview Copy), p. 159. Moreover, Professor Georges Fischer notes the following : "On retrouve ici, mutatis mutandis, mais d'une façon plus précise, la norme édictée par l'article 2, paragraphe 6, de la Charte de l'O.N.U." Fischer, La non-prolifération des armes nucléaires, p. 86.

175 This is the position taken by the American Administration. See Report on NPT, 1969, p. 8.

sult of this imported equipment will not be diverted to the manufacture of nuclear weapons. Certainly, it would be unnecessary to follow the use made of all the "equipment or material" furnished to these States. The words "especially designed" mentioned in Article III-2 should restrict such control to items such as ceramic barriers for gaseous diffusion plants, heavy water and nuclear grade graphite.

Since States Party to the NPT are under the obligation not to provide nuclear material to non-nuclear-weapon States unless such material is subject to IAEA safeguards, the case of the non-nuclear-weapon States which are Members of Euratom ought here to be brought up once more. Before their adherence to the NPT, these States had continued to be supplied with nuclear material by the United States under no IAEA safeguards. This was a clear violation of Article III-2 of the NPT.

In March 1972, two years after the entry into force of the NPT, US officials not only admitted the violation of this article but also decided not to comply immediately with it. The reason given was that the European Communities were negotiating in "good faith" a safeguards agreement with the IAEA.<sup>176</sup> However, it should be noted that this agreement is required by the first paragraph of Article III. The second paragraph of this article still holds and should have been adhered to.

As a result of the discrimination in the application of IAEA safeguards between the Parties and the non-parties to the NPT, and more particularly between the non-nuclear-weapon States Party to the Treaty and the non-nuclear-weapon States not Party to it, the 1975 NPT Review Conference de-

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<sup>176</sup> See International Herald Tribune, 18-19 Mar. 1972. It should be recalled that two of the five conditions established by the Euratom countries for accepting IAEA safeguards were the continuation of the supply of nuclear material to the Community until an agreement was reached and the refusal of a "guillotine clause."

voted great attention to this issue. Apart from its urging the application of full-scope safeguards on all the peaceful nuclear activities in importing States not party to the NPT, which has been examined earlier in this Chapter, the Conference in its Final Declaration tackled three related aspects to this issue as follows:<sup>177</sup>

(i) In expressing its strong support for effective IAEA safeguards, the Conference recommended that intensified efforts be made towards the standardization and the universality of application of IAEA safeguards, while ensuring that safeguards agreements with non-nuclear-weapon States not Party to the NPT are of adequate duration, preclude diversion to any nuclear explosive devices and contain appropriate provisions for the continuation of the application of safeguards upon re-export.

The three measures recommended by the Conference had already been implemented by the IAEA. The latter's practice had even gone beyond the scope of the measures recommended.

With regard to the duration of the safeguards agreements concluded under the Agency's Safeguards System (INFCIRC/66/Rev. 2), the Board of Governors of the IAEA, in February 1974, decided that the duration of such agreements should be related to the period of actual use of the items covered by safeguards and that the provisions for terminating the agreement should be formulated in such a way that the rights and obligations of the Parties continue to apply in connection with the supplied nuclear material and with special fissionable material produced, processed or used in or in connection with supplied nuclear material, equipment, facilities or non-nuclear material, until such time as the Agency has terminated the application of safeguards thereto. This

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<sup>177</sup> The following is mainly based on the Final Declaration of the NPT Review Conference as in Appendix 17, IAEA Doc. GOV/INF/306, 5 Feb. 1976 and the "Guidelines for Nuclear Transfers" as in Appendix 19, unless otherwise indicated.

concept has been incorporated in all safeguards agreements entered into subsequent to the Board's decision.

With regard to the preclusion of diversion to nuclear explosive devices, all safeguards entered into by the IAEA pursuant to the Agency's Safeguards System, contain, as previously mentioned, the standard undertaking that the government or the governments concerned will not use safeguarded items in such a way as to further any military purpose, which has been taken to involve as well the non-use of nuclear materials for the development, manufacture or testing of nuclear explosive devices of any kind. However, in order to dispel any doubt in this respect, an express clause to the effect that the safeguarded nuclear materials will not be used for nuclear explosions or any other military purposes is now being included in the safeguards agreements.

As to the "continuation of safeguards," the export of nuclear materials covered by safeguards pursuant to the Agency's Safeguards System, is subject to the condition that no safeguarded material shall be transferred outside the jurisdiction of the State in which it is being safeguarded unless arrangements have been made by the Agency to safeguard the material in the State into which it is being transferred. Safeguards agreements concluded pursuant to that system provide also that the same condition shall apply with respect to transfers of equipment, facilities or other items subject to safeguards under those agreements.

(ii) With regard to the implementation of Article III.2 of the NPT, the Conference noted that a number of States suppliers of nuclear material or equipment had adopted certain minimum, standard requirements for IAEA safeguards in connection with their exports of certain such items to non-nuclear-weapon States not party to the NPT. In this respect, the Conference reiterated the particular importance of the undertaking of non-diversion to nuclear weapons or other nuclear explosive devices, as included in the said requirements.

In the course of 1974 and 1975 a number of States had already advised the Director General, inter alia, that when making exports of source or special fissionable material and of certain categories of equipment and material in the nuclear field to non-nuclear-weapon States not party to the NPT unless arrangements for Agency safeguards were made by the State receiving such exports.<sup>178</sup>

The followup "Guidelines for Nuclear Transfers" made public in January 1978 by the 15 Member States of the IAEA, and which included a "Trigger List" of items that would "trigger" safeguards upon export, set, inter alia, the following conditions which are being repeated here as a round up:

- A formal assurance from the government of the importing country explicitly excluding uses that would result in any nuclear explosive device.
- Effective physical protection by the importing country to prevent any unauthorized use or handling of the material or facilities.
- The requirement that the exported item be covered by safeguards and that the duration and coverage of these safeguards conform to guidelines established by the IAEA Board of Governors.
- An undertaking that the recipient government will seek identical assurances if the items derived from them are to be re-exported.

The items in the "Trigger List" include so-called sensitive nuclear material and equipment such as the major critical components of reprocessing plants, uranium enrichment plants and heavy-water production facilities. As a further control, the US Nuclear Non-Proliferation Act of 1978, for example, prohibits the exportation of such items under any agreement for peaceful co-operation unless the agreement

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<sup>178</sup> IAEA Doc. INFCIRC/209, 3 Sept. 1974 and INFCIRC/209/Add. 1-7.

specifically designates such items as items for export. At present, the United States has virtually imposed an embargo on their export.

(iii) The Conference hoped that further examination be undertaken for common safeguards requirements in respect of nuclear material processed, used or produced by the use of scientific and technological information transferred in tangible form to non-nuclear-weapon States not party to the NPT.

The Agency's safeguards system does not provide specific procedures in this respect. For the first time, provision was made for the application of safeguards in connection with the supply of "specified information" in a safeguards agreement between the IAEA, France and the Republic of Korea which was approved by the Board of Governors in September 1975. This example was followed, for example, in the tri-lateral agreements concluded between the IAEA and: Brazil and the FRG; Pakistan and France; South Africa and France; and Spain and Canada.

By mid-1979 the Agency was applying safeguards in 11 non-nuclear-weapon States not parties to the NPT with substantial nuclear activities, namely Argentina, Brazil, Chile, Colombia, India, Israel, North Korea, Pakistan, South Africa, Spain and Turkey. In four of these eleven States (India, Israel, South Africa and Spain) unsafeguarded nuclear facilities are in operation and in three (India, Israel and South Africa) the unsafeguarded plants are significant from the point of view of producing weapons-usable material. As a result of this, the IAEA concludes that the building of a worldwide non-proliferation regime remains incomplete.<sup>179</sup>

#### (c) The Transfers to Nuclear-Weapon States

As pointed out earlier, Senator Pastore's formula of article III provided for the application of international safeguards on the transfer of nuclear material or equipment

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<sup>179</sup> Doc. NPT/CONF.II/PC.II/7, 25 July 1979, p. 7.

to all States without distinction. Moreover, the US representative at the ENDC explained in July 1966 that the NPT safeguards system would involve IAEA or equivalent international safeguards on such transfer to any State. However, it soon appeared that safeguards would not be applied on transfers to nuclear-weapon States. This prompted Sweden to include in its aforementioned draft of article III a provision similar to the one proposed by Senator Pastore.

After the submission of Article III in the identical treaty drafts of 18 January 1968, the US representative at the ENDC explained that while there was no treaty requirement for safeguards on exports to nuclear-weapon countries, parties were in no way precluded from requiring such safeguards as a condition for exports to nuclear-weapon States, if they wished to do so.<sup>180</sup> Sweden, for example, envisaged, as a matter of policy, making it a condition that the material exported to a nuclear-weapon State should be used exclusively for peaceful purposes and subjected to IAEA safeguards.<sup>181</sup>

The "continuation of safeguards" or the so-called "right of pursuit"<sup>182</sup> with respect to nuclear material transferred to nuclear-weapon States would ensure that both the material itself and any subsequent generation of nuclear material derived from it would never support any nuclear military programme in these States. This would largely contribute to the vertical non-proliferation of nuclear weapons.

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<sup>180</sup> ENDC/PV. 368, 21 Feb. 1968, para. 44.

<sup>181</sup> A/C.1/PV. 1564 (prov.), 9 May 1968, p. 17. It should be noted, however, that the Swedish representative in an earlier statement at the ENDC expressed concern that such a policy would probably put countries requiring safeguards on their exports to nuclear-weapon States in an awkward position of commercial discrimination. ENDC/PV. 300, 30 May 1967, para. 21.

<sup>182</sup> The continuation of safeguards is provided for in Article XX.A.5 of the IAEA Statute.



### 3. The Avoidance of Hampering the Economic and Technological Development or International Co-operation in the Field of Peaceful Nuclear Activities

Article III-3 stipulates that :

"The safeguards required by this article shall be implemented in a manner designed to comply with article IV of this Treaty, and to avoid hampering the economic or technological development of the Parties or international co-operation in the field of peaceful nuclear activities, including the international exchange of nuclear material and equipment for the processing use or production of nuclear material for peaceful purposes in accordance with the provisions of this article and the principle of safeguarding set forth in the Preamble of the Treaty." (Emphasis added.)

Since the IAEA is not a party to the NPT, these basic guidelines had to be translated into concrete obligations incumbent on the Agency. But before dealing with these obligations as prescribed in INFCIRC/153, the two underlined portions of Article III.3 ought to be elucidated. They reflect two basic principles which have greatly influenced the formulation of the new safeguards system.

The phrase "avoid hampering the economic or technological development" is, in fact, derived from paragraph 9 of the IAEA safeguards document INFCIRC/66/Rev. 1, which states that "(b)earing in mind Article II of the Statute, the Agency shall implement safeguards in a manner designed to avoid hampering a State's economic or technological development." This basic principle, which is explicitly repeated in the NPT, is not only meant as an instruction to minimise intrusion, but also it reflects the fundamental concept of the Treaty that safeguards should be able to follow any peaceful nuclear activity without limiting or directing it.<sup>183</sup>

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<sup>183</sup> Rometsch, loc.cit., p. 387. General E.L.M. Burns, the Canadian representative at the ENDC, explained that the words "for the exclusive purpose of verification" were inserted in the first paragraph of Article III to meet

The second underlined phrase reaffirms the principle set forth in the fifth preambular paragraph of the NPT which reads as follows :

"Expressing their support for research, development and other efforts to further the application, within the framework of the International Atomic Energy Agency safeguards system, of the principle of safeguarding effectively the flow of source and special fissionable materials by use of instruments and other techniques at certain strategic points."<sup>184</sup>

The Federal Republic of Germany was instrumental in formulating this preambular paragraph. The following statement made by Willy Brandt, the then Federal Minister for Foreign Affairs, at the Bundestag on 27 April 1967, a few months before the submission of the first identical treaty drafts of 24 August 1967, is quite revealing :

"We start from the assumption that the application of safeguards will not disturb production processes or violate production secrets, but will rather obviate the danger of diversion. For this it will suffice to apply safeguards to source or fissionable materials and the fuel cycle at certain strategic points, using automatic instruments as far as possible."<sup>185</sup>

At the Conference of Non-Nuclear-Weapon States, Willy Brandt explained that the FRG was making considerable efforts

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the arguments of Euratom and of other countries which professed to fear that IAEA and its inspectors might interfere with and hamper their legitimate peaceful atomic energy development. E.L.M. Burns, "The Nonproliferation Treaty", p. 799.

184 The US representative at the ENDC, in answer to a question raised by his colleague from the UAR as to the appropriateness of including this paragraph in the preamble instead of the text of the treaty itself, explained that the formulation of the paragraph was regarded as an expression of principle and not as a technical detail. See ENDC/PV. 367, 20 Feb. 1968, para. 28 (UAR) and ENDC/PV. 370, 27 Feb. 1968, para. 89 (US).

185 Treaty on the Non-Proliferation of Nuclear Weapons. German Attitude and Contribution. Documentation, p. 18.

to control the flow of fissionable material at strategic points, and that the pertinent work was being carried out, in collaboration with the IAEA, at the Nuclear Research Centre at Karlsruhe.<sup>186</sup>

Simplification of safeguards techniques was aimed at not only by the FRG and its partners in Euratom but also by all the similar advanced States in the field of nuclear technology who were keen on protecting themselves against industrial espionage.<sup>187</sup> The result was Resolution F of the Conference of Non-Nuclear-Weapon States which in its sub-paragraph 2(a) specifies that :

"The safeguard procedures should be simplified by the use of instruments and other technical devices at certain strategic points of the flow of nuclear materials, with a view to restricting the safe-<sup>188</sup> guarding operations to the necessary minimum."

In its first report on the implementation of the results of the Conference, the IAEA recognised that considerable effort and technological development would be essential before instrumentation could be used on a large scale. It would continue, however, to work towards the objective of making the application of safeguards as effective as possible, limiting to the minimum the need for the presence of inspectors and reducing the cost of safeguards.<sup>189</sup>

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186 A/CONF.35/SR. 3, 3 Sept. 1968, pp. 23-33. The German delegation at the Conference submitted a working paper on the results achieved by the Karlsruhe Centre. See A/CONF.35/C.1/1, 13 Sept. 1968 and A/CONF.35/C.1/SR.11, 18 Sept. 1968, pp. 59-61. Almost two years later, at the invitation of the FRG, a symposium on progress in safeguards techniques organised by the IAEA was held in Karlsruhe from 6 to 10 July 1970 where 32 countries were represented. Safeguards Techniques, Proceedings of a Symposium. Karlsruhe, 6-10 July 1970 (Vols. I and II) (Vienna : IAEA, 1970).

187 For example, see A/CONF.35/SR. 6, 6 Sept. 1968, p. 73 (Japan) and A/CONF.35/SR. 9, 10 Sept. 1968, p. 118 (Spain).

188 Final Document of the Conference of Non-Nuclear-Weapon State (A/CONF.35/10, 1 Oct. 1968), p. 11.

189 IAEA doc. GC(XIII)/INF/110, 29 July 1969, paras. 25-26.

The IAEA, in the process of developing such new procedures, convened a number of technical meetings from December 1968 to September 1970.<sup>190</sup> These meetings helped the Safeguards Committee of the IAEA in establishing the new safeguards system. Since the general features and procedures of the new system are treated in the following part, we shall confine ourselves here to citing the first authentic definition of "strategic point" as provided in INFCIRC/153.<sup>191</sup> This definition was, in fact, prompted by the basic NPT principle of safeguarding nuclear material at strategic points. According to paragraph 116 of INFCIRC/153 :

"'Strategic point' means a location selected during examination of design information where, under normal conditions and when combined with the information from all 'strategic points' taken together, the information necessary and sufficient for the implementation of safeguards measures is obtained and verified; a 'strategic point' may include any location where key measurements related to material balance accountancy are made and where containment and surveillance measures are executed."

The specific obligations of the IAEA as set forth in INFCIRC/153 are, in fact, based on the two basic principles treated above and the other provisions of Article III-3, some of which are repeated in paragraph 4 of that document. According to the following paragraph 5, the Agency should take every precaution to protect commercial and industrial secrets and other confidential information coming to its knowledge in the implementation of the safeguards agreement. Although this obligation is derived from paragraphs 13 and 14 of the old safeguards document (INFCIRC/66/Rev. 2), it has a new form.

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190 For the list of these meetings, see Ryukichi Imai, "Nuclear Safeguards", p. 10.

191 For earlier definitions, see Scheinman, "Euratom and the IAEA", p. 77 and McKnight, Nuclear Non-Proliferation, p. 87, note 2.

Moreover, a new obligation, in substance and form, is found in paragraph 6 of INFCIRC/153. If this paragraph is read together with the above definition of "strategic point", some of the main features of the new safeguards system can be discerned. Paragraph 6 reads as follows :

"The Agreement should provide that in implementing safeguards pursuant thereto the Agency shall take full account of technological developments in the field of safeguards, and shall make every effort to ensure optimum cost-effectiveness and the application of the principle of safeguarding effectively the flow of nuclear material subject to safeguards under the Agreement by use of instruments and other techniques at certain strategic points to the extent that present or future technology permits. In order to ensure optimum cost-effectiveness, use should be made, for example, of such means as :

- (a) Containment as a means of defining material balance areas for accounting purposes;
- (b) Statistical techniques and random sampling in evaluating the flow of nuclear material; and
- (c) Concentration of verification procedures on those stages in the nuclear fuel cycle involving the production, processing, use or storage of nuclear material from which nuclear weapons or other nuclear explosive devices could readily be made, and minimization of verification procedures in respect of other nuclear material, on condition that this does not hamper the Agency in applying safeguards under the Agreement."

The 1975 NPT Review Conference in the very first paragraph of its review of Article III, notes that the verification activities of the IAEA respected the sovereign rights of States and did not hamper the economic, scientific or technological development of the Parties to the NPT or international co-operation in peaceful nuclear activities. It urged that this situation be maintained. The Conference attached considerable importance to the continued application of safeguards under Article III, on a non-discriminatory basis, for the equal benefit of all States Party to the Treaty.

In view of the growing restrictions imposed in the course

of the following five years by some supplier countries on the export of certain material and equipment to Parties and non-Parties in the NPT alike, it is quite doubtful that the 1980 NPT Review Conference would reach a similar conclusion.

#### IV. The General Features, Procedures and Financing of NPT Safeguards

As can be deduced from the analysis carried out so far, safeguards are expected to be applied to an unprecedented number of States or groups of States with different political and economic systems. They are expected to be applied more precisely to an unprecedented quantity of nuclear material in almost the entire nuclear fuel cycle in many of these States. The universal and comprehensive nature of NPT safeguards has therefore necessitated the establishment of a safeguards system which must be formalised, objective and rational.

The system must be formalised in order to help eliminate the inherent open-endedness of an inspection process : at what point will the safeguarding authority be satisfied ? The pre-establishment of certain limits beyond which safeguards are satisfactory and below which additional action is required is therefore necessary. The system must be objective in order to leave as little room as possible for subjective feelings on the part of the State or the safeguarding authority. Predetermined terms of communication between the two is therefore also necessary. Finally, the system must be rational because of the overwhelmingly large size of the safeguards task. Therefore, it will be internationally and generally acceptable only if the cost burden is somehow reasonable.<sup>192</sup>

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<sup>192</sup> See W. Häfele, "Systems analysis in Safeguards of Nuclear Material", p. 305 and W. Häfele in B.T. Feld and Others (Eds.), Impact of New Technologies on the Arms Race (Cambridge, Massachusetts : The M.I.T. Press, 1971), pp. 237-240.

On the basis of these three considerations, we move on to discuss the general features or principal components of the new system, the procedures needed for its implementation and operation, and the financing of the system.

### 1. The General Features<sup>193</sup>

Existing national accountancy and control systems are one of the foundations for IAEA safeguards under the NPT. A State Party to the Treaty is obliged to establish and maintain a system of accounting for and control of all nuclear material subject to safeguards. The Agency then applies its safeguards in such a manner as to enable it to verify the findings of the State's system. This will also include independent measurements. In performing its verifications, the Agency has to take due account of the technical effectiveness of the State's system, if necessary, compensating for inadequacies in the national system with an expanded Agency role or suggesting modifications to improve national controls. Any such improvements will often prove to be extremely valuable for the efficient management and control of nuclear material at the national and plant levels, in addition to enabling appropriate verification by the IAEA.<sup>194</sup>

The alternative could have been to delegate the Agency full responsibility for accounting and controlling nuclear material in each State, a solution which would have been untenable in terms of manpower and costs.

Since safeguards apply, as demonstrated earlier, to the location and flow of nuclear material, the subunit of the State in the safeguards system is the material balance area (MBA). The latter is a unit which facilitates material accountability; that is, an area such that all material entering or leaving

<sup>193</sup> The following is essentially drawn from the excellent lucid explanations made by the IAEA in its pamphlet Safeguards, pp. 14-16 and 22.

<sup>194</sup> See para. 7 of INFCIRC/153.

is measurable and in which an inventory of the material situated there can be determined when necessary. The measurements are made at key measurement points (KMB) which are strategic points - i.e. locations where essential information on flow and inventory can be gathered and verified - at which nuclear material appears in such a form as to lend itself to such measurements.<sup>195</sup> A typical KMB in a reprocessing plant is the place where plutonium in a pure form comes out of the process stream and is measured before going on to be fabricated into fuel or to storage.<sup>196</sup>

A particular plant in the fuel cycle is not always an ideal MBA. Sometimes it is easier to consider more than one facility as being within one MBA; conversely, several MBAs might have to be defined within one facility. Nuclear material located outside facilities normally associated with the fuel cycle is also accounted through the MBA concept. The size and boundaries of a material balance area are related to the accuracy with which that unit can be defined and the adaptability of safeguards techniques. The establishment of material balance areas and the selection of key measurement points are of course done in consultation between the State and the Agency and included in the Subsidiary Arrangements. Once defined, the MBAs serve as accounting areas both for the State and for the IAEA, although the State and even more the facility operator often use further sub-divisions of the MBA for more precise process accountancy.

The national system of accounting for and controlling nuclear material must be such that the IAEA can verify independently its operation. Agency verification is accomplished by three means : material accountancy as the safeguards measure

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195 See the three definitions provided for the three underlined terms in Ibid., paras. 108, 110 and 116 respectively.

196 "Safeguards - Old and New", p. 28.



of fundamental importance, and containment and surveillance as important complementary measures.<sup>197</sup>

(a) Material Accountancy refers to a collection of measurements and other determinations, which enable the State, and the Agency in verifying the State, to maintain a current picture of the location and movement of nuclear material.

Once the quantity of material in a material balance area is determined, a book inventory of that MBA may be maintained by recording measured flows into and out of the area at the appropriate KMPs. A physical inventory as taken by the operator, i.e. the determination of all the nuclear material on hand in the MBA, is verified by the Agency and the correspondence between the contents of the MBA on paper and in fact is the basis for judging whether or not any material is unaccounted for. Material unaccounted for is then evaluated by statistical methods, in order to establish with a reasonable confidence if significant losses or diversions have occurred.<sup>198</sup>

It is therefore essential that material accountancy be reliable and successful in detecting losses. For this reason the IAEA insists that national accountancy and control systems incorporate a number of features - some of which are listed in paragraph 32 of INFCIRC/153.

With respect to the IAEA/Euratom Agreement, the Community as pointed out earlier, undertook changes in its regulations and procedures for the collection and evaluation of information on nuclear material in order to adapt them to the Agency's requirements and, in particular, to base its accounting technique on a structure of material balance areas.

(b) Containment as a complementary measure to that of material accountancy is achieved through several methods, including the application of locks, seals and other devices

<sup>197</sup> See paragraph 29 of INFCIRC/153.

<sup>198</sup> See paragraph 30, Ibid. See also part II.1.(c) above.

on nuclear storage areas to prevent changes in the contents without the IAEA's knowledge and thus to add a measure of certainty which can simplify accounting verification. Such devices are periodically inspected for evidence of tampering.

(c) Surveillance differs from containment in that it is the detection rather than the prevention of material movement which is intended. Surveillance can be accomplished by mounting cameras or other devices at strategic points to monitor containment measures or observe inventory changes. Personnel may fulfill similar assignments by manning key observation points continuously or periodically.

In view of the central role of material accountancy in the NPT safeguards system, it was singled out in a separate paragraph in the review of Article III of the Final Declaration of 1975 NPT Review Conference. The latter expressed the hope of all States having peaceful nuclear activities will establish and maintain effective accounting and control systems and welcomed the readiness of the IAEA to assist States in so doing.

The IAEA has worked out guidelines on the establishment and maintenance of systems of accountancy and control which will be periodically reviewed for updating. They are available to all Member States of IAEA. The latter will continue to provide advice on request in this matter. Moreover, formal training is planned for personnel from national systems of accountancy and control.

## 2. Procedures<sup>199</sup>

Four procedural elements common to all safeguards systems whether domestic, bilateral, regional or international are adopted by the NPT safeguards system. They differ, however, from those followed by the old IAEA safeguards system in several respects. These four procedural elements are design review of the nuclear facilities; records kept by the opera-

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199 The following is essentially drawn from R. Rometsch, loc. cit.; Safeguards, pp. 20-32; and "Safeguards - Old and New."

tors of such facilities on material production, change and movement; reports to the Agency on material production, change and movement; and inspections of recorded and reported data as well as of material flow and inventory.

(a) Design Review : During the discussions with the State leading to the Subsidiary Arrangements the IAEA staff examines information submitted by the State on Agency questionnaires relating to the design characteristics of existing facilities in the State. (After initiation of safeguards in the country the Agency is to be provided with similar information for review of the design features of any new facilities into which nuclear material subject to safeguards may be introduced, or design modifications of existing facilities).<sup>200</sup>

The main purpose of the design review is the definition of material balance areas and the selection of key measurement points<sup>201</sup> instead of the vague objective, under the old system, of satisfying the IAEA "that the facility will permit the effective application of safeguards". The right to approve (or implicitly disapprove) of the design of a facility no longer appears. This is consistent with the general philosophy of the NPT which is to permit and indeed, to encourage every kind of peaceful nuclear activity and transaction, provided that no diversion of nuclear material to nuclear weapons takes place,

The Agency might verify by inspection the information submitted for its design review since inaccurate information could easily result in the application of inappropriate or ineffective safeguards.<sup>202</sup>

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200 See Paras. 8 and 42-45 of INFCIRC/153.

201 See Para. 46, Ibid.

202 See Para. 48, Ibid.

(b) Records, Reports and Inspections:<sup>203</sup> The three tables<sup>204</sup> reproduced in the following pages together with the definitions provided in the glossary in Appendix 27 to this study are self-explanatory.

However, apart from the fact that the recording and reporting requirements are streamlined, it has to be pointed out that amongst the most significant changes in the NPT safeguards system are those relating to inspections. Instead of the earlier concept of "access at all times to all places and data and to any person" the IAEA's inspectors will, under normal operating conditions, carry out their functions only at the strategic points already selected when the design review was made, and to the operating records of the plant in order to compare the information included therein with that included in the reports sent to the Agency. The maximum inspection effort that the IAEA is allowed to carry out is defined more precisely in terms of man-days of inspection and not in terms of a given number of inspections a year as in the old system.

If abnormal events occur, such as an accident or the loss of nuclear material exceeding an amount pre-defined, the inspector will have access to additional points in the facility. As an added precaution against arbitrary decisions by the IAEA, this right of access will only be exercised after consultation with the Government concerned. If intensified inspection does not disclose the material or, at least the cause of the inexplicable loss or gain, restrictions on access will be progressively lifted and the search further intensified until it is either successful or the IAEA and the facility operator come to the conclusion that there is no satisfactory explanation. In the latter, very unlikely event, the matter will

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203 Paras. 51-89, Ibid.

204 Reproduced from the IAEA pamphlet Safeguards, figures 8-10, pp. 28-29 and 31.

# R E C O R D S

<u>TYPE</u>	<u>PURPOSE</u>	<u>COVERAGE</u>	<u>ENTRIES</u>	<u>CONTENTS</u>
Accounting Records :				
Inventory Change	To maintain current book inventory	IAEA safeguarded material flow for each MBA	<ul style="list-style-type: none"> <li>a) measured receipts and shipments</li> <li>b) material produced and processed</li> <li>c) measured discard</li> <li>d) retained waste</li> <li>e) loss</li> <li>f) exemptions/de-exemptions</li> </ul>	<ul style="list-style-type: none"> <li>a) date and type of change</li> <li>b) batch data</li> <li>c) source data</li> <li>d) other MBA's affected</li> </ul>
Physical Inventory measurements	To permit determination of physical measurement	IAEA safeguarded material in each MBA	physical inventories	<ul style="list-style-type: none"> <li>a) date</li> <li>b) measurement results</li> </ul>
Adjustments and corrections	Adjustments and corrections to inventory change or physical inventory records	MBA	as required	as required
Operation Records :	To record operations related to accounting measures	MBA	as required	<ul style="list-style-type: none"> <li>a) operating data used in measurements</li> <li>b) calibration and sampling data</li> <li>c) error estimating procedures</li> <li>d) physical inventory taking operations conducted</li> <li>e) loss evaluation procedures</li> </ul>

# REPORTS

TYPE	PURPOSE	COVERAGE	CONTENTS	SUBMISSION TIMING
Initial Report	To apprise IAEA of initial physical inventory on which to base book inventory	All safeguarded material within a country, listed by MBA	a) KMP's b) batch data	Within 30 days of last day of the month in which Agreement enters into force
Inventory Change Report	To provide IAEA with changes to book inventory	Any change in any MBA; or, if specified in Subsidiary Arrangements, small changes may be consolidated into one inventory change for any MBA	a) batch data b) date and nature of change c) other MBA's affected d) concise notes : i. operating data ii. anticipated operations	Within 30 days of last of the month of the change
Material Balance Report	To indicate the material balance as based on a physical inventory of nuclear material actually present	All safeguarded material in each MBA	a) last previous physical inventory b) subsequent changes c) book inventory d) shipper/receiver differences e) adjusted book inventory f) present physical inventory g) material unaccounted for (MUF)	Within 30 days of a physical inventory
Special Report	To notify IAEA of special circumstances, such as loss or change of containment	All safeguarded material	As required	Without delay

# I N S P E C T I O N S

TYPE	PURPOSE	YEARLY MAXIMUM INSPECTION EFFORT	ACCESS DURING INSPECTION	MINIMUM PRIOR NOTIFICATION
Ad hoc	a) verify initial report b) identify or ve- rify changes to initial situat- ion c) international transfers	not applicable	a) for initial report or situational changes; any loca- tion where IAEA sa- feguarded material is present b) for international transfers: points where material is to be packed or un- packed, or arrival point	a) for initial re- port or situa- tional changes: 1 Wk. b) for internatio- nal transfers: 24 h
Rou- tine	a) verify report- record consist- ency b) verify location, identity, quan- tity, and compo- sition of all IAEA safeguarded material c) verify inform- ation on cause of shipper/re- ceiver differ- ences, book in- ventory uncer- tainties, and material unac- counted for	a) for MBA's outside faci- lities with E* less than or equal to 5 ef- fective kg**: 1 ins- pection b) for reactors and seal- ed stores: 1/6 man- year per facility c) for other facilities involving Pu or U (en- richment exceeding 5%): 30x E man-days per fa- cility, but no less than 1.5 man-years d) for other facilities: 1/3 man-year + 0.4xE per facility	a) documented strate- gic points b) location of records	a) for any facili- ty with Pu or U (enrichment ex- ceeding 5%) ex- cept reactors: 24 hours b) for all other facilities: 1 week c) to conduct ran- dom sampling for any routine inspection: un- announced

TYPE	PURPOSE	YEARLY MAXIMUM INSPECTION EFFORT	ACCESS DURING INSPECTION	MINIMUM PRIOR NOTIFICATION
Special	a) verify special reports b) whenever IAEA considers all available information inadequate to fulfill its safeguards duties	not applicable	determined during consultation between IAEA and State which will precede all special inspections	notification given during pre-inspection consultation

\*E = inventory or annual throughput of safeguarded material, whichever is greater, in effective kg, cf INFCIRC/153 Para 80.

1 man-year = 300 man-days

1 man-day = 8 man hours

\*\* An effective kilogram is a special unit devised to equate quantities of different nuclear materials for the purpose, inter alia, of determining maximum routine inspection effort, cf. INFCIRC/153 Para 104.



presumably be reported to the Agency's Board of Governors which will decide what further steps should be taken.

With regard to the designation, conduct and visits of inspectors, the NPT safeguards system prescribes some similar provisions to those included in the 1961 inspector document and the 1968 safeguards document.<sup>205</sup> Some other old provisions were disregarded and some other new provisions were added. Briefly, these provisions prescribe that in assigning an inspection team to a specific country the Director-General of the IAEA submits the names, professional qualifications and nationalities of all those proposed to the State concerned, awaiting affirmation before any inspectors are assigned. The State has the right to refuse the designation of any inspector, in which case the Director-General withdraws that inspector from the team of those finally designated.<sup>206</sup> Great importance was attached to the right to refuse the designation of inspectors, especially by the industrialised countries of Western Europe which were against the idea of having Eastern European inspectors imposed on them.

At the 1975 NPT Review Conference, considerable importance was attached to the recruitment of inspectors on as wide a geographical basis as possible. The Conference also recommended that safeguards training be made available to personnel from all geographic regions. The number of inspectors available to perform the required activities rose from 70 at the end of 1975 to 131 at the end of 1978.

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205 IAEA Docs. GC(V)/INF/39, 28 Aug. 1961 and INFCLRC/66/Rev. 2, 16 Sept. 1968.

206 According to the 1961 inspector document the Director-General may refer to the Board, for its appropriate action, the repeated refusal of a State to accept the designation of an Agency inspector if, in his opinion, this refusal would impede the inspections provided for in the safeguards agreement. IAEA Doc. GC(V)/INF/39, 28 Aug. 1961, para. 2.

Inspection activities are meant not to hamper the construction or safe normal operation of any facility. For this reason accompaniment of inspectors by a State representative on the basis of non-interference is permissible. The operation of directing the operation of any equipment by Agency inspectors is forbidden. Moreover, inspectors do not enjoy unlimited access.

In addition to the limitations mentioned above, special material balance areas may be established around a process step involving commercially sensitive information.<sup>207</sup>

The Agency is under the obligation to report inspection results, and other comments concerning safeguards, only to the State concerned.

With respect to the IAEA/Euratom Agreement, the procedures that the Protocol attached to it foresees for inspections are spelt out in much more detail than in other safeguards agreements, since they take into account the experienced inspectorate which Euratom has built over many years. Arrangements are agreed upon to co-ordinate between the Agency and Community inspections. Routine inspections by the Agency are to be carried out simultaneously with certain, but not all, inspections carried out by the Community. Whenever the Agency can achieve the purpose of its routine inspections by observation of the Community's inspection activities, it is to do so. It is, however, provided in Article 14 of the Protocol that :

- "(i) With respect to inspection activities of Agency inspectors to be implemented other than through the observation of the inspection activities of the Community inspectors, which can be foreseen, these shall be specified in the Subsidiary Arrangements; and
- (ii) In the course of an inspection, Agency inspectors may carry out inspection activities other than through the observation of the inspection activities of the Community inspectors where they

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207 Para. 46-(6)-(iv) of INFCIRC/153. This provision is new.

find this to be essential and urgent, if the Agency could not otherwise achieve the purposes of its routine inspections and this was unforeseeable."<sup>208</sup>

A final word has to be said here on the "Subsidiary Arrangements" as an attached document to the safeguards agreement, containing the detailed procedures and technicalities left open in the agreement itself. Contrary to previous practice, the Subsidiary Arrangements do not contain any rights or obligations additional to those in the safeguards agreement, but consist of a series of tables, information sheets, report forms, etc., and indicate the mechanism for keeping them up to date. The new Facility Attachment to the Subsidiary Arrangements as a particularly important document for the implementation of safeguards at the facility level reflects most of the distinguishing features of the NPT safeguards system, e.g., specifications of material balance areas and key measurement points.

In 1975 a Standing Advisory Group on Safeguards Implementation (SAGSI) was established to provide the IAEA with, in particular, recommendations on the formulation of basic safeguards criteria such as "timely detection" and "significant quantities" on quantitative rather than qualitative basis in order to make it possible to give a precise measure of the effectiveness of results achieved and to permit planning of safeguards activities in an operative and objective manner.

The establishment of the Group was welcomed by the 1975 NPT Review Conference. The latter recommended that more attention and fuller support be given to the improvement of safeguards techniques, instrumentation, data-handling and implementation in order, among other things, to ensure optimum cost-effectiveness.

In its report to the second session of the Preparatory Committee of the Second NPT Review Conference in July 1979,

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<sup>208</sup> IAEA Doc. INFCIRC/193, 14 Sept. 1973, p. 32.

the IAEA points out that the quantity and quality of safeguards R&D work carried out by the Agency has changed significantly in recent years. Whereas most of the R&D effort consisted of individual research contracts or agreements, at present, several Member States combined their individual research agreements into a single support programme of IAEA safeguards. The major portion of the programme is directed toward the development of practical non-destructive instruments and techniques and the development of effective and reliable containment and surveillance devices.

The Agency also continues to develop its safeguards approaches and procedures for all kinds of facilities.<sup>209</sup>

### 3. Financing NPT Safeguards

According to Article XIV.B.1(b) of the IAEA Statute, the cost of safeguarding Agency projects or bilateral and multilateral submissions is considered an administrative expense. According to paragraph D of the same article, this expense is apportioned among all Member States of the Agency in accordance with a scale established by the General Conference guided by the principles adopted by the UN in assessing the contributions of Member States to the regular budget of the UN. Article XIV also forsee in its paragraph C that safeguards agreements relating to bilateral and multilateral submissions (Safeguards Transfer Agreements) might provide for the recovery of some of the cost of safeguards by the Agency - presumably from the Governments party to these agreements.

With regard to unilateral submissions to safeguards, which is virtually the case under the NPT, the IAEA Statute makes no explicit provision concerning the cost incurred in safeguarding the States parties to the safeguards agreements. Likewise neither the 1968 safeguards document nor the inspectors docu-

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<sup>209</sup> For more details, see NPT/CONF.II/PC.II/7, 25 July 1979, pp. 8-14 and IAEA Safeguards on Nuclear Fuel Cycle Facilities (DPI/1) (Reprinted for the Second NPT Review Conference, Geneva, 1980).

ment is helpful in this respect, except that the latter document provides that if inspectors request and receive accommodation, transport or the use of any equipment, reasonable compensation shall be paid "if agreed on." Consequently the question of cost was left to be settled in the Unilateral Submission Agreements.

All such Agreements except the first one as well as all Transfer Agreements provided that costs incurred in connexion with safeguards should ultimately be borne by the Agency, regardless of whether they were originally incurred by it, by the State, or by the controlled facility. This approach had repeatedly been challenged as not taking account of the possibility of the Agency recovering expenses pursuant to Statute Article XIV.C. However, the majority of the Board had adopted it, at least on a tentative basis, pragmatically in order not to discourage submissions to Agency safeguards and also on the more basic ground that the imposition of international controls was in the interest of the world community rather than in that of the States directly concerned. The subsidiary arrangements circumscribed this liability by providing that certain expenses would not be charged to the Agency (such as those incurred by the State in preparing routine reports or in having its officials accompany inspectors); furthermore, costs were only reimbursed by the Agency if before they were incurred the Agency was informed of the proposed charge and had given its agreement.<sup>210</sup>

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<sup>210</sup> Paul C. Szasz, op.cit., p. 617. It is to be noted, however, that provisions of this type appeared in the text of the Mexican Submission Agreement required by the Treaty of Tlatelolco. IAEA Doc. INFCIRC/118, 23 Sept. 1968, para. 24. Moreover, when the IAEA Board of Governors approved this Agreement, it seems to have been the view of most members of the Board that the costs of such an agreement must under the Statute be part of the administrative expenses of the Agency and met by assessed contributions of the membership as a whole. McKnight, Atomic Safeguards, pp. 59-60.

The prospects that IAEA safeguards would be applied under the NPT to an unprecedented number of States entailing a tremendous increase in costs triggered the need for reconsidering the practices so far adopted by the IAEA.<sup>211</sup>

Three basic trends emerged from the discussions which took place in different forums. The first trend, reflecting the views of most of the industrialised countries, was in favour of charging the IAEA with the costs of safeguards. For the United States, for example, the beneficiary of safeguards was not only the country in which the reactor was located but the world at large.<sup>212</sup> For other countries, mostly European, fear of commercial discrimination motivated their choice. As very well put by Switzerland in its aide-mémoire to the ENDC "(t)he costs of control should be borne by the central organ in order to avoid commercial discrimination against peaceful exports of nuclear material from non-nuclear-weapon States for the benefit of nuclear-weapon States not subject to control or of non-signatory non-nuclear-weapon States."<sup>213</sup>

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211 For example, the Director-General of the IAEA estimated that the percentage of safeguards costs in the assessed IAEA budget for 1975 would be somewhat less than 25 per cent instead of 10 per cent in the 1970 budget. See note 73 above. Moreover, the cost of implementation of the American and British offers to submit their peaceful nuclear activities to IAEA safeguards was unofficially estimated to have reached over 4 million dollars in 1973, Kyukichi Imai, "Nuclear Safeguards", p. 16.

212 This was the view of the US Atomic Energy Commission as provided in the Hearings on NPT, 1969, p. 495. Allan McKnight, who was in favour of that solution, noted that the fact was often overlooked that 73 per cent of the cost was paid by the four nuclear-weapon Member States plus the three countries with the most advanced nuclear industries. McKnight, Atomic Safeguards, p. 31.

213 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 21 (ENDC/204, 24 Nov. 1967), para. 2(c). At the Conference of Non-Nuclear-Weapon States a Swiss draft resolution later co-sponsored by Spain recommended,

The second trend, reflecting the views of some advanced States in the field of nuclear energy such as India and South Africa, was in favour of charging each State with the expenses of safeguarding its nuclear activities. India, for example, consistently maintained that safeguards was a cost associated with nuclear operations and should be borne by those benefitting from the facility requiring controls, and that any other policy would soon hopelessly distort the Agency's Regular Budget and place unjustified burdens on the many States on which it was assessed,<sup>214</sup>

The third trend, reflecting the views of most of the developing countries, was in favour of charging in the first place the nuclear-weapon States with all or most of the costs of NPT safeguards.<sup>215</sup> The latter countries were considered to be the main beneficiaries of the NPT. Most important, it was feared that if the costs were to be borne by the Agency's regular budget, little room might be left for the promotional tasks of the Agency such as technical assistance.<sup>216</sup>

A compromise was reached by the Safeguards Committee of the IAEA, which was endorsed by the IAEA Board of Governors in April 1971 and approved by the General Conference in September of that year. On the basis of this compromise as well as on the basis of the model NPT safeguards agreement

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inter alia, that the cost of the safeguards procedures should be charged to the IAEA budget. However, this recommendation was later deleted in another draft resolution co-sponsored by five other countries from Latin America. See A/CONF.35/C.1/L.2, 13 Sept. 1968; L.9, 21 Sept. 1969; and L.14, 24 Sept. 1969 respectively.

214 Paul C. Szasz, op.cit., p. 654, note 504.

215 For example, see ENDC/PV. 367, 20 Feb. 1968, para. 24 (UAR).

216 For example, see A/PV.1917 (prov.), 4 Dec. 1970 (Brazil), Brazil was also of the view that States not party to the NPT should not contribute to the cost of safeguards.

(INFCIRC/153), safeguards expenses would be met in the following way :

(a) In the first place, the NPT safeguards agreement with a Member of the IAEA should provide "that each party thereto shall bear the expenses it incurs in implementing its responsibilities thereunder. However, if the State or persons under its jurisdiction incur extraordinary expenses as a result of a specific request by the Agency, the Agency shall reimburse such expenses provided that it has agreed in advance to do so. In any case the Agency shall bear the cost of any additional measuring or sampling which inspectors may request".<sup>217</sup>

Under these provisions the Agency would bear the greater part of all safeguards costs, that is, all costs incurred by it, including costs of travel and subsistence of inspectors. Reimbursement would not be made for current expenses in respect for the establishment and keeping of records, the submission of design data or reports, or the expenses that the States would incur if it assigns an official to accompany Agency inspectors. These provisions codifies, in fact, the practices previously followed in the subsidiary arrangements of the Transfer Agreements and Unilateral Submission Agreements.

(b) The expenses incurred by the Agency are to be met from the Regular Budget, but the method of assessing IAEA Members for contributions is adjusted so as to limit the share of safeguards costs borne by Members having low per capita net national products.<sup>218</sup> One of the results was that all countries falling under the newly adjusted method paid the same

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217 INFCIRC/153, para. 15(a). See also sub-para. (b) relating to the Parties to the NPT not members of the Agency who, in principle, should reimburse fully to the Agency its safeguards expenses.

218 IAEA Doc. GC(XV)/RES/283, 27 Sept. 1971.



amount with respect to safeguards in 1972 and 1973 as they paid in 1971, in spite of the increase in safeguards costs. In the scale of assessments for 1974 the 71 Member States having low per capita national products were required to contribute only 7 per cent approximately of the total safeguards estimate of \$ 4.204.000, while the 31 other Member States were required to contribute the rest.<sup>219</sup>

The 1975 NPT Review Conference recommended that, during the review of the arrangements relating to the financing of safeguards, the less favourable financial situation of the developing countries be fully taken into account. It recommended further that the Parties to the NPT concerned seek measures that would restrict within appropriate limits the respective share of developing countries in safeguards costs.

In 1976 the General Conference of the IAEA approved a revised set of principles for the assessment of Members' contributions towards the Agency's Regular Budget. It was agreed that these revised principles would apply from 1977 through to 1980 and be reviewed by the Board in 1980. In the scale of assessment for 1979, 77 Members having low per capita net national products were required to contribute a total of \$511,823 or 3 percent towards the total safeguards amount of \$16,710,000, while 33 Members will contribute \$16,198,177 or 97 percent.

#### V. Non-Compliance

There is almost unanimity among scientists that no system of safeguards is fool-proof in detecting diversion of nuclear material from peaceful to military activities.<sup>220</sup> Moreover,

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<sup>219</sup> IAEA Doc, GC(XVII)/507/Mod. 1, 17 Sept. 1973, Appendix, para. 5.

<sup>220</sup> For example, see Mason Willrich, "International Control of Civil Nuclear Power," Bulletin of the Atomic Scientists, Vol. XXIII, No. 3, Mar. 1967, p. 37; Hearings on Nonproliferation, 1966, pp. 52 and 57-58 (Dr. Glenn Seaborg); Hearings on NPT, 1969, p. 499 (US AEC); and R. Rometsch in Mason Willrich (Ed.), Civil Nuclear Power

the cost of raising the probability of detection is very high in proportion to the extra level of confidence gained from it.<sup>221</sup>

Diversion may take place undetected, especially if the material unaccounted for (MUF) is within acceptable limits as explained earlier above. In fact, diversion of nuclear material cannot be confirmed absolutely, but only in the form of a probabilistic statement such as "the IAEA can no longer verify that there has not been diversion".<sup>222</sup>

If safeguards fail after all to deter diversion and if there are strong indications that diversion has taken place, the IAEA Statute prescribes in its Article XII.C the sanctions that might be imposed by the Agency as well as the procedures for their application. The procedures adopted by the Agency might set in motion actions taken by the Security Council or the General Assembly of the United Nations. and/or measures taken separately by the States directly concerned.

#### 1. The IAEA

In accordance with Article XII.C, IAEA inspectors "shall report any non-compliance to the Director-General who shall thereupon transmit the report to the Board of Governors. The Board shall call upon the recipient State or States to remedy forthwith any non-compliance which it finds to have occurred. The Board shall report the non-compliance to all members and to the Security Council and General Assembly of the United Nations." In the event of failure of the recipient State or States to take fully corrective action within a reasonable time, the Board may take the following measures :

and International Security, p. 59. The latter expert who was the Inspector General of the IAEA thought it would not be possible to detect, through reasonable safeguards, the diversion of nuclear material sufficient for a single bomb.

221 See Ryukichi Imai, "Nuclear Safeguards", p. 2.

222 Ibid., pp. 13 and 15. See also para. 19 of INFCIRC/153.

- It may direct curtailment or suspension of assistance being provided by the Agency or by a Member of the Agency.
- It may call for the return of materials and equipment made available to the recipient Member or group of Members. This provision of Article XII.C is reinforced by Article XII.A.7 which lists this measure as one of the rights and responsibilities that the Agency is to have with respect to safeguarded projects and arrangements.
- It may in accordance with Article XIX.B recommend the General Conference of the Agency to suspend any non-complying Member from the exercise of the privileges and rights of membership.<sup>223</sup>

The safeguards document of 1968 (INFCIRC/66/Rev. 2) merely states in its paragraph 18 that in the event of any non-compliance, the Agency may take the measures set forth in Articles XII.A.7 and XII.C of the IAEA Statute. The model NPT safeguards agreement (INFCIRC/153) is quite elaborate in this respect. Paragraphs 18 and 19 read as follows :

"18. The Agreement should provide that if the Board, upon report of the Director General, decides that an action by the State is essential and urgent in order to ensure verification that nuclear material subject to safeguards under the Agreement is not diverted to nuclear weapons or other nuclear explosive devices the Board shall be able to call upon the State to take the required action without delay, irrespective of whether procedures for the settlement of a dispute have been invoked.

19. The Agreement should provide that if the Board upon examination of relevant information reported to it by the Director General finds that the Agency is not able to verify that there has been no diversion of nuclear material required to be safeguarded under the Agreement to nuclear weapons

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223 For several questions raised in connexion with these measures, see Paul C. Szasz, op.cit., pp. 602-605. With respect to Members of Euratom, the Commission of the European Communities can record infringement and impose penalties such as the total or partial withdrawal of nuclear material. See Jacchia and Finzi, loc.cit., p. 371.

or other nuclear explosive devices, it may make the reports provided for in paragraph C of Article XII of the Statute and may also take, where applicable, the other measures provided for in that paragraph. In taking such action the Board shall take account of the degree of assurance provided by the safeguards measures that have been applied and shall afford the State every reasonable opportunity to furnish the Board with any necessary reassurance."

It is worth noting that in accordance with paragraph 22 of the same document, disputes with regard to a finding by the Board under paragraph 19 or an action taken by the Board pursuant to such a finding would not be submitted to an arbitral tribunal. This is apparently due to the statutory authority of the Board to reach such a finding or to take such an action. Moreover, since diversion cannot always be confirmed absolutely by technical means, political considerations may be determinant in the Board's action, thus rendering it unsusceptible to legal arbitration. This exception from arbitration was contested on the ground that if the Board had the last word the IAEA would be both a judge and a party in its own case.<sup>224</sup>

#### . The United Nations.

Since the Board must report a case of diversion to the Security Council and General Assembly of the United Nations, one of these organs or both may wish to take necessary measures to redress the situation, measures which may be adopted parallel to the eventual sanctions imposed by the IAEA.

A consistent non-observance of the IAEA's safeguards may,

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224 Eric Stein, "Impact of New Weapon Technology on International Law : Selected Aspects", p. 364. In the past in none of the arbitration clauses of the safeguards agreements had the sanction provisions been excluded from the final decision of the tribunal. However, the Mexican Submission Agreement concluded in compliance with the Treaty of Tlatelolco excluded questions relating to non-compliance from the competence of the tribunal. Paul C. Szasz, op.cit., p. 605.

in view of the relevance of the acquisition of nuclear weapons for international peace and security, set in motion the machinery for the restoration of international peace and security in accordance with Chapter VII of the UN Charter which may lead to intervention, including intervention by armed force.<sup>225</sup> Moreover, as noted by one analyst, past experience with the United Nations, especially with regard to peacekeeping, demonstrates the limitations placed on it when the major Powers disagree. Moreover, it is unreasonable, in his view, to expect that the entire General Assembly would rise against an alleged violator, or that a violating State, having taken action in pursuit of what it considered its vital interests, would be moved by the rhetoric of the Assembly.<sup>226</sup>

### 3. The States

Since States Members of the IAEA may be directed by the Board of the Agency to curtail or suspend all assistance provided to the recipient delinquent State, the co-operation of supplier States would be necessary to render the Board's action effective. Members of the United Nations may also, on their own initiative, co-operate in curtailing or suspending all assistance. However, it may happen that a supplier State disagrees with the finding of the Board and therefore continues to supply the delinquent State with the nuclear material needed for its programme. Moreover, the latter State may have ceased to depend on outside assistance to maintain its programme, which may render any punitive action, except may be the use of force, meaningless.

The supplier States in their "Guidelines for Nuclear Transfers" bearing in mind Article XII of IAEA Statute reached an understanding that if there is a violation of

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<sup>225</sup> Urs Schwarz, Confrontation and Intervention in the Modern World, p. 177.

<sup>226</sup> Scheinman, "Nuclear Safeguards", p. 47.

IAEA safeguards by a recipient, they should agree on an appropriate response and possible action which could include the termination of nuclear transfers to that recipient.

In order to remedy the shortcomings referred to above with regard to the imposition of sanctions, several solutions have been suggested. For example, it has been suggested that violation disputes be referred to an ad hoc negotiating mechanism established outside the institutional frameworks of the UN and the IAEA, a body which would be relatively free from established principles and could try to reach some kind of understanding on the merits of the particular case.<sup>227</sup> Leonard Beaton also suggested that an international Agency, presumably the IAEA, should be created to lease uranium and buy back accumulated stocks of plutonium, thus cutting off the temptation or possibility for a country to "go nuclear."<sup>228</sup> In fact, Article XII.A.5 of the IAEA Statute allows the Agency "with respect to any Agency project, or other arrangement" to require deposit with it of any excess of any special fissionable materials recovered or produced as a by-product over what is needed.

A study of International Plutonium Storage (IPS) was started in 1976. Under any scheme for IPS which may be agreed, all separated plutonium in excess of current requirements would be stored under international control until it was needed for a safeguarded use in reactors or research.

Other preventive measures aimed at strengthening the non-proliferation regime are physical protection already dealt with and spent fuel management, which the IAEA began to study in 1976. The results of the study carried out in

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227 Ibid. Scheinman also contemplates shifting the locus of authority in the safeguarding field from the Board to the Secretariat and specifically the Director-General (p. 48).

228 Leonard Beaton, "Nuclear Fuel-For-All," Foreign Affairs, Vol. 45, No. 4, July 1967, pp. 662-669.

INFCE, which will be made public in February 1980, are expected to be instructive in this respect.<sup>229</sup>

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To sum up, the NPT triggered off the expansion and modernisation of international safeguards to be applied to the peaceful nuclear activities of an unprecedented number of States. A new system of safeguards was felt to be needed in view of the size, nature and scope of the safeguards activities entrusted to the IAEA under the NPT.

The parties to the application of NPT safeguards are the States, the IAEA and so far Euratom as a regional organisation acting on behalf of its Member States. The non-nuclear-weapon States Party to the NPT are the only States under the obligation to submit all their peaceful nuclear activities to IAEA safeguards. The implementation of the offers made by the United States and the United Kingdom would render NPT safeguards less discriminatory. However, no system of safeguards would establish equality of treatment among all States so long as the nuclear-weapon States refuse to renounce the manufacture of nuclear weapons.

The IAEA nearly emerges as the uncontested authority for carrying out the safeguards required by the NPT. The Agency is assuming, in fact, the role of an arms control organisation, a role which is no longer ancillary to the assistance provided by it or at its request, or at the request of parties to a bilateral or multilateral arrangement.

Euratom succeeded in preserving its safeguards system, but without negating the right of the IAEA to verify its safeguarding activities. In fact, in order to secure Euratom's approval and co-operation, the NPT safeguards system has been greatly influenced by and adapted to the Euratom system in several respects. Euratom, on the other hand, had to adapt some of its safeguards procedures to those

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<sup>229</sup> See Doc. NPT/CONF.II/PC.II/7, 25 July 1979, pp. 19-20.

newly adopted by the IAEA. An assessment of the IAEA/Euratom working relationship will have to await for some time because of the belated implementation of the Agreement concluded between them.

The objective of NPT safeguards is the timely detection of diversion of nuclear material from peaceful nuclear activities to the manufacture of nuclear weapons or of other nuclear explosive devices. The NPT system is not intended to search for hidden nuclear weapons or clandestine production of such weapons. In this respect it differs from the Tlatelolco system which provides for special inspections in order to verify compliance with all the activities prohibited under the Treaty, including the search for nuclear materials and nuclear weapons clandestinely introduced from abroad.

In view of the limited objective of NPT safeguards, the conclusion of the Convention on Physical Protection of Nuclear Material is a great step forward towards an integrated non-proliferation regime.

The NPT system is "material oriented." In this respect, the Euratom system had its greatest influence. In considering nuclear material as the direct object of safeguards, the new system has tried to avoid the intrusiveness of the old system which is "plant oriented" and has, at the same time, tried to achieve significant economies.

In the first place, the requirement to create a national system of accounting for and control of nuclear material has the virtue of avoiding giving the IAEA direct responsibility for controlling and accounting for nuclear material in each State, with the eventual involvement of a huge number of inspectors, a prospect which would have been unacceptable. Secondly, since the new system looks at the entire nuclear fuel cycle, it has become possible to eliminate inspection at many spots. Moreover, the possibility of estimating more precisely the man-days needed for inspection as well as the use of instruments should reduce to a great extent the intrusiveness and cost of safeguards.



It is hoped, however, that the considerations of intrusiveness and cost will not prove to be at the expense of the effectiveness of the new system in the timely detection of diversion and the prevention of diversion by the risk of early detection. At its face value the new system seems to be effective. Its basic characteristics of formalisation, objectivity and rationality; its general features of material accountancy, containment and surveillance; and its elaborate procedures which have gained from past experience under the old system should all, in principle, ensure that the objective of safeguards is being attained.

Article III can be bolstered and improved upon in many ways. In our view the following three remedies are most essential:

- Since three nuclear-weapon States, namely the United States, the United Kingdom and France have offered to submit their peaceful nuclear activities to IAEA safeguards, it remains to convince the two other nuclear-weapon States to do likewise. Moreover, the application of safeguards, through a formal undertaking in Article III, on at least all the peaceful nuclear activities of the nuclear-weapon States Party to the NPT should be pursued. The Soviet Union, faithful to its long stand on the inspection of its own territory, would in all probability resent such endeavours. However, there is always a chance that under continuous international pressure, the Soviet Union might unilaterally accept a symbolic inspection as a gesture of co-operation in contributing to the improvement of safeguards techniques. If this were to happen, it would be the greatest breakthrough in arms control since the advent of the nuclear age.

- All transfers of nuclear material to nuclear-weapon States should be subject to IAEA safeguards. This would ensure that no country, whether nuclear or non-nuclear, is contributing consciously or unconsciously to the nuclear-weapon programmes of the nuclear-weapon States. An amendment of Article III-2 would be required, which would institutionalise "the continuation of safeguards" required so far by some

non-nuclear-weapon States with respect to their transactions with the nuclear-weapon States.

- Article III should follow the example of the Treaty of Tlatelolco in providing special inspections in the case of suspicion that prohibited activities under Articles I and II of the NPT are taking place. The virtue of special inspections is to dissuade those countries aspiring for a nuclear-weapon status from concealing the fissionable material they have accumulated over the years under no or weak safeguards.

However, Article III in its present form and content is not the only element to reckon with as far as the application of safeguards is concerned. Of no less importance are the "Guidelines for Nuclear Transfers" worked out by the so-called London Suppliers Club. Although concerned with the prospects of nuclear-weapon proliferation, the supplier States without consulting the recipient States have imposed a restrictive policy that runs counter to the letter and spirit of Article IV of the NPT. The restrictions are such that they may prove to be counterproductive, as more countries in defiance would try to create their own independent fuel cycles. Pakistan is but one example.

"The Atoms for Peace" proposal in 1953 emanated from the realization that progress cannot be stopped and that knowledge about the atoms and their potentials would inevitably spread. Therefore, the problem had to be dealt with not in suppression but in encouragement under healthy and safe conditions. This should be the case today. No material or equipment should be denied to others because it is "sensitive" as long as adequate safeguards are applied. No material or equipment should be subject to safeguards unnecessarily. Moreover, no ban on knowledge should be tolerated. The more relaxed the co-operation is, the more safe it will be. The more tense it is, the more unstable the world can be.

The problem of sanctions remains an acute one, as in all other arms control measures. The success of measures pro-

vided for in the IAEA Statute largely depends on the co-operation of all States in adopting and in strictly observing the necessary sanctions.

To conclude, the NPT safeguards system is not fool-proof; no other safeguards systems can pretend that they are. The new system lays down, however, a solid basis for continuous improvement in safeguards techniques and offers, above all, the opportunity to establish over the years a tradition and a universal rule of conduct which would be difficult to reverse, or even contravene, with impunity. The danger, however, resides today in those countries with substantial unsafeguarded nuclear activities. This brings us to the issue of universality of adherence to the NPT.



## CHAPTER 11

### Universality of Adherence : Article IX

#### Texts :

#### Article IX

1. This Treaty shall be open to all States for signature. Any State which does not sign the Treaty before its entry into force in accordance with paragraph 3 of this article may accede to it at any time.
2. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Governments of the United States of America, the United Kingdom of Great Britain and Northern Ireland and the Union of Soviet Socialist Republics, which are hereby designated the Depositary Governments.
3. This Treaty shall enter into force after its ratification by the States, the Governments of which are designated Depositaries of the Treaty, and forty other States signatory to this Treaty and the deposit of their instruments of ratification. For the purposes of this Treaty, a nuclear-weapon State is one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to January 1, 1967.
4. For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Treaty, it shall enter into force on the date of the deposit of their instruments of ratification or accession.
5. The Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification or of accession, the date of the entry into force of this Treaty, and the date of receipt of any requests for convening a conference or other notices.
6. This Treaty shall be registered by the Depositary Governments pursuant to article 102 of the Charter of the United Nations.

## Article XI

This Treaty, the English, Russian, French, Spanish and Chinese texts of which are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of this Treaty shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding States.

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During the NPT negotiations the question of universality of adherence to the Treaty was unanimously considered essential for its effectiveness. All the treaty drafts which were submitted to or considered by the ENDC contained provisions allowing all States without any distinction or hindrance the right to become party to the NPT. They all followed the precedent set by the Test-Ban Treaty. With the exception of the provisions concerning the entry into force of the Treaty, almost all the other provisions of Article IX were also tailored to the provisions of the Test-Ban Treaty. During the process of formulating Article IV, some suggestions were made, but no formal amendments were submitted in view of modifying any of the provisions of any of the treaty drafts. Some suggestions and queries led, however, to some pertinent modifications or interpretations.

Although any State can adhere to the NPT, it is quite unlikely that the Treaty as it presently stands will be universally adhered to in the near future. As far as the nuclear-weapon States are concerned, neither France nor China has the intention of adhering to the Treaty. Moreover, a number of non-nuclear-weapon States, well advanced in the field of nuclear energy, the so-called potential or threshold nuclear-weapon Powers, have either refused to adhere to the Treaty, or have lagged in signing or ratifying it.

In the following three parts we shall first analyse the provisions of adherence to the Treaty as set forth in Article IX. Secondly, the positions of the declining and reticent States and the impact of their abstention on the effectiveness of the NPT will be assessed.

## I. Procedures of Adherence and Related Questions

Since the NPT entered into force on 5 March 1970, it may appear rather academic to dwell on the provisions of the Treaty concerning adherence and entry into force. However, these provisions should not only be of legal interest to the negotiators of future arms control and disarmament measures, but they also reflect significant political considerations which may weigh considerably on the formulation of such measures. In fact, the Treaty itself, as already mentioned, has been influenced by the Test-Ban Treaty and has in its turn influenced subsequent arms control agreements.<sup>1</sup> In the following sections we shall discuss the adherence to the Treaty, the role of the Depositary Governments the adherence of which was essential for the entry into force of the Treaty, and lastly the entry into force which was also dependent on a certain number of adherents.

### 1. Adherence

The first paragraph of Article IX stipulates that the Treaty "shall be open to all States for signature. Any State

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1 See Article X of the "Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof" and Article XIV of the "Convention of the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction". GA Res. 2660(XV), 7 Dec. 1970, Ann. in GAOR, 25th Sess., Suppl. No. 28 (A/8028), p. 13 and GA Res. 2826(XXVI), 16 Dec. 1971, Ann. in GAOR, 26th Sess., Suppl. No. 29 (A/8429), p. 32.

which does not sign the Treaty before its entry into force ... may accede to it at any time." This clause is identical to its counterpart in the Test-Ban Treaty. It was included in both the American and Soviet treaty drafts of 1965 and in all the subsequent identical or Joint American/Soviet treaty drafts of 1967 and 1968.

When the clause reappeared for the first time in the American treaty draft of 1965, the US representative at the ENDC explained that they had suggested the clause because of their belief that the treaty should have world-wide application.<sup>2</sup> The NPT as well as the Test-Ban Treaty differed in this respect from the other multilateral conventions concluded in the post-World-War II period within or under the auspices of the United Nations, conventions which were usually open to States meeting certain requirements.<sup>3</sup>

However, the "all States" formula, which was adopted by subsequent arms control agreements, was not meant to set a precedent for all other multilateral agreements. As pointed out by the US representative at the UN, Ambassador Arthur Goldberg, "(t)he United States supports the accession clause now included in the draft treaty because of the special and exceptional character of this treaty. The fact that the 'all States' clause has been employed in this instance does not indicate that it is suitable in other circumstances."<sup>4</sup>

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2 ENDC/PV. 224, 17 Aug. 1965, p. 19.

3 See the comments made on the Test-Ban Treaty by Egon Schwelb, "The Nuclear Test Ban Treaty and International Law", American Journal of International Law, Vol. 58, No. 3, July 1964, pp. 653-654.

4 A/PV.1672 (prov.), 12 June 1968, p. 72. At the UN Conference on the Law of Treaties held in Vienna in 1968 and 1969, an article proposed by a group of 13 countries according every State the right to participate, inter alia, in a multilateral treaty the object and purpose of which is of interest to the international community of States



The "all States" formula was also considered not to effect the recognition or status of an unrecognized régime or entity which might elect to file an instrument of accession to the NPT. It was stressed more than once by the representatives of the United States that recognition of a régime or acknowledgement of an entity could not be inferred from the signature of ratification of or accession to a multilateral agreement.<sup>5</sup> As the People's Republic of China was not expected to sign or accede to the Treaty, the emphasis put by the United States on the question of recognition had the main objective of reassuring the Federal Republic of Germany that its signing of the Treaty would not imply recognition of the German Democratic Republic if the latter signed or acceded to the Treaty.<sup>6</sup>

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as a whole was rejected by a comfortable majority. See UN Doc. A/CONF.39/15, 1 May 1969, paras. 27-32 in UN Conference on the Law of Treaties, Official Records, 1st and 2nd Sess., Vienna, 26 Mar.-24 May 1968 and 9 Apr.-22 May 1968, Documents of the Conference, pp. 236-237, hereinafter cited as Conference on the Law of Treaties.

5 ENDC/PV. 224, 17 Aug. 1965, p. 19 and ENDC/PV. 1672 (prov.), 12 June 1968, pp. 72-75.

6 It should be pointed out that United States unilateral decision on the means of accession to the Test-Ban Treaty without consulting the West Germans made the latter morbidly suspicious of US intentions during the NPT negotiations. Bader, The United States and the Spread of Nuclear Weapons, p. 53. In its note of 28 November 1969 on signing the NPT, the Government of the FRG declared that the signature of the Treaty did not imply recognition of the GDR under international law and therefore, no relations under international law with the GDR should arise out of the Treaty for the FRG. Treaty on the Non-Proliferation of Nuclear Weapons. German Attitude and Contribution. Documentation, p. 60. Compare this note with the statement made by the Government of the FRG on signing the Test-Ban Treaty on 19 August 1963 which alluded to the GDR as "the Soviet Zone of Occupation". The statement is quoted in Schwelb, loc.cit., p. 657. With respect to the Test-Ban Treaty it should also be pointed out that in transmitting its instrument of ratification on 10 January 1964, the Government of the UAR stated that the ratification did not mean or imply any recognition of Israel or any treaty relations with Israel. Ibid., p. 660 (information received from the Treaty Section, UN Office of Legal Affairs).

Moreover, the United States made it clear that it preserved its right to object if later an unrecognised entity should seek to assert privileges such as participating in a conference called under Articles VIII or X of the Treaty,<sup>7</sup> i.e., conferences for considering amendments to the Treaty, or for reviewing the operation of the Treaty, or for deciding upon the continuation of the Treaty.

The signature of the NPT did not create by itself a legal obligation. Paragraph 2 of Article IX provides that the Treaty shall be subject to ratification by signatory States. However while signature does not create a legal obligation, it entails a good-faith obligation on the part of the signatory State not to behave in a manner contrary to the Treaty until it indicates that it is not going to ratify it. This legal concept is embodied in Article 18(a) of the Vienna Convention on the Law of Treaties.<sup>8</sup> This concept gains considerable importance in the case of the NPT which has been signed by many States who have deferred their ratifications until the Treaty has been ratified or acceded to by other States. The case of Euratom should be recalled here as a vivid example.

The ratification of the Treaty establishes the consent of the State to be bound by the Treaty on the international plane upon the deposit of the instrument of ratification with the Depositary Governments.<sup>9</sup> Paragraph 2 of Article IX provides

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7 A/PV. 1672 (prov.), 12 June 1968, pp. 73-75. With respect to the Test-Ban Treaty, the United States also took the position that in signing the Treaty in Moscow, East Germany accepted an obligation not to conduct nuclear tests, but acquired no privileges such as voting or participating in conferences to consider amendments to the Treaty. Hearings on Test Ban, p. 18 (Secretary of State Dean Rusk).

8 Vienna Convention on the Law of Treaties (Doc. A/CONF.39/27) in Conference on the Law of Treaties, p. 291.

9 It is in this sense that the term "ratification" is used in this chapter.

that instruments of ratification and instruments of accession shall be deposited with the Governments of the United States, the United Kingdom and the USSR, which are designated the Depositary Governments.

Paragraph 2 of Article IX is identical to the one proposed by the United States in its first treaty draft of 1965. The Soviet treaty draft of 1965 left blank the names of the Governments which were to be designated as Depositary Governments. This brings us to the designation of the Depositary Governments and their role.

## 2. The Depositary Governments

The 1965 American treaty draft raised no problems with regard to the designation of the three Depositary Governments.<sup>10</sup> The precedent had already been set by the Test-Ban Treaty.<sup>11</sup> It should be recalled that the clause providing for three Depositary Governments in the latter Treaty was a novelty designed to avoid, or to evade, the embarrassment caused by the differences among the "Original Parties" as to the status of the German Democratic Republic and China.<sup>12</sup> The same considerations prompted the reintroduction of the clause in the 1965 American draft and later in the Treaty itself.

All the identical treaty drafts of 1967 and 1968 as well as the Joint draft of 11 March 1968 followed the example of the 1965 Soviet treaty draft in leaving blank the names of the

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<sup>10</sup> The representative of Nigeria wondered, however, whether the treaty could not be signed and deposited at the UN, at least in addition to the three countries specified. ENDC/PV. 228, 31 Aug. 1965, p. 20.

<sup>11</sup> Since the Test-Ban Treaty was mainly negotiated and first signed by the three States, the latter are referred to as "the Original Parties...which are hereby designated the Depositary Governments." See Appendix 6.

<sup>12</sup> The United Kingdom and the United States refused on 16 August 1963 to accept Soviet notification that the GDR had signed. The Soviet Foreign Ministry rejected the Western attitude. See Schwelb, loc.cit., pp. 651-660.

Depositary Governments.<sup>13</sup> Apparently, the names were left unspecified until it was possible to agree finally on the mode of the Treaty's entry into force in which they were to play a crucial role. The names only reappeared in the revised treaty draft of 31 May 1968 together with the proviso that the Treaty would enter into force when instruments of ratification had been deposited by the three States and 40 other signatories.

Apart from their role in receiving the instruments of ratification and accession and in bringing the Treaty into force, the Depositary Governments enjoy as well other privileges and duties. Their privileges are with regard to the amending process of the Treaty in which their influence is stronger than that of the other Parties, and with regard to the convocation of review conferences which may be held beyond the first review conference which has to be held five years after the entry into force of the Treaty. These privileges will be discussed in the following chapter.

As to the duties of the Depositary Governments, they are provided for in paragraphs 5 and 6 of Article IX and Article XI. According to the former, the Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification or of accession, the date of the entry into force of the Treaty, and the date of receipt of any requests for convening a conference or other notices. Moreover, the Depositary Governments were under the obligation to register the Treaty pursuant to Article 102 of the UN Charter. These provisions are almost identical to those provided for in paragraphs 5 and 6 of Article III of the Test-Ban Treaty. They

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13 After the submission of the identical treaty drafts of August 1967, Mexico suggested that the Depositary States should be two nuclear and two non-nuclear Powers. ENDC/PV. 331, 19 Sept. 1967, para. 22.

appeared in all the NPT drafts with slight differences or changes from one draft to another.

Lastly, the NPT provides in its Article XI that the Treaty, the English, Russian, French, Spanish and Chinese texts of which are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of the Treaty shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding States. With the exception of attributing authenticity to the French, Spanish and Chinese texts, these provisions, which were included in all treaty drafts, are almost identical to those of Article V of the Test-Ban Treaty. Since the latter was negotiated between and initially signed by only three English and Russian-speaking States, its authentic texts were only English and Russian.

### 3. Entry Into Force

The provisions relating to the entry into force of the NPT differ drastically from those of the Test-Ban Treaty. The latter entered into force after its ratification by the three "Original Parties" and the deposit of their instruments of ratification. This procedure for entry into force was quite normal since these three "Original Parties" were the only countries in addition to France which were carrying out tests in the environments prohibited by the Treaty.

With respect to the NPT, the situation is quite different. The main obligations of the Treaty are incumbent on the non-nuclear-weapon States, the wide adherence of which is essential for the effectiveness of the Treaty. Therefore, for the Treaty's entry into force it was necessary to secure not only the ratification of the nuclear-weapon States but also the the ratification of a wide number of non-nuclear-weapon States. This concern was reflected in all the treaty drafts except that of the Soviet Union submitted in 1965 as pointed out in the following paragraph.

As far as the nuclear-weapon States were concerned, the 1965 American treaty draft required the ratification of the United Kingdom, the USSR and the United States, whereas the 1965 Soviet treaty draft required only the ratification of "all Parties possessing nuclear weapons".<sup>14</sup> The identical treaty drafts of August 1967 and January 1968, as well as the joint treaty draft of March 1968, all required the ratification of "all nuclear-weapon States signatory" to the Treaty. This was followed by the definition of the nuclear-weapon State treated in Chapter 5 of this study, a definition which was appropriate then in the context of the treaty's entry into force, so long as the nuclear-weapon States were not specified by name or qualification.

The Brazilian representative at the ENDC saw a danger in the possibility that a nuclear-weapon State hostile to the Treaty, i.e., the People's Republic of China, could sign it and delay the entry into force indefinitely by failing to ratify.<sup>15</sup> For this reason paragraph 3 of Article IX of the treaty draft of 31 May 1968 provided that the entry into force of the Treaty required the ratification of "the Depositary Governments", which were also named for the first time in the preceding paragraph, rather than "all nuclear-weapon States signatory", as in the 11 March draft.<sup>16</sup> In the final draft commended by the UN General Assembly, the wording of paragraph 3 of Article IX was slightly changed to read "the States, the Governments of which are designated Depositaries of the Treaty" instead of "the Depositary Governments". After these modifications were made, the definition of the nuclear-weapon State at the end of paragraph 3 of Article IX appears out of context. It would have been much more appropriate to mention

14 See Appendix 3-B, Article V-3.

15 ENDC/PV. 363, 8 Feb. 1968, para. 42.

16 See the clarifications made by the US representative at the First Committee of the UN General Assembly in A/C.1/PV. 1577 (prov.), 31 May 1968, p. 83.

the definition at the beginning of the text of the Treaty in relation to the basic obligations of the Parties to the Treaty as set forth in Articles I and II.

The choice of the three nuclear-weapon States whose ratifications were required for the entry into force of the Treaty raised no controversy on the part of the non-nuclear-weapon States. The aforementioned well-received observation made by the representative of Brazil reflected, in fact, a realisation on the part of all States that both China and France were not going to adhere to the Treaty in the foreseeable future. This is not to say that the adherence of both States was not considered by many non-nuclear-weapon States essential for the effectiveness of the Treaty.<sup>17</sup>

It was with regard to the number and qualifications of the non-nuclear-weapon States whose ratifications were required for the entry into force of the Treaty that some controversy arose.

The first American draft treaty of 1965 required the adherence of a certain number of Governments for the entry into force of the Treaty, but the number was left blank until it had been decided later. The United States considered that the number should be sufficiently high so that the treaty would be a significant anti-proliferation measure, but not so high as unduly to delay its entry into force.<sup>18</sup> The number was specified in the identical treaty drafts of 18 January 1968

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17 This was more apparent at the early stage of the NPT negotiations when there was still some hope that both China and France would join the non-proliferation effort. For example, see GAOR, 20th Sess., Plenary Meetings (Vol. II), 1360th plen. mtg, 13 Oct. 1965, para. 116 (Kuwait); and Ibid., 1st Cttee, 1366th mtg, 27 Oct. 1965, para. 17 (Ghana) and 1367th mtg, 28 Oct. 1965, para. 12 (Uganda). See also A/C.1/PV. 1566 (prov.), 13 May 1968, pp. 26-27 (Uganda).

18 ENDC/PV. 224, 17 Aug. 1965, p. 19. See also ENDC/PV. 325, 24 Aug. 1967, para. 25.

whereby paragraph 3 of Article IX required the ratification of 40 States in addition to "all nuclear-weapon States signatory" to the treaty. In explaining this new provision to the Members of the ENDC, the US representative pointed out that the number forty "would ensure that when the treaty enters into force it will begin without delay to achieve its vital importance of halting the proliferation of nuclear weapons."<sup>19</sup> Since then the number forty had remained unchanged, in spite of the numerous suggestions which were made in view of setting a higher and a more representative number. Some of these suggestions were merely concerned with quantitative considerations in setting the higher number. Some other suggestions were more concerned with qualitative considerations in setting this number.

With respect to those suggestions concerned with quantitative considerations, Mexico suggested sixty as a suitable number, on the basis that the main obligation of the NPT devolved upon the non-nuclear-weapon States.<sup>20</sup> The Nigerian representative at the ENDC believed it would be undemocratic and rather discourteous for the ENDC to recommend to the UN General Assembly a treaty which would not even require the support of at least a simple majority of its Members. Therefore, he suggested that the number should be equivalent to the majority of the membership of the United Nations.<sup>21</sup> Another representative of an African State, Zambia, felt that the accession to the NPT by the Member States of the UN should reflect the serious desire of the entire membership to do away with nuclear weapons. He therefore proposed that two-thirds or half of the UN membership would be about adequate for the NPT to enter into force.<sup>22</sup>

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19 ENDC/PV. 357, 18 Jan. 1968, para. 70.

20 ENDC/PV. 331, 19 Sept. 1967, para. 22.

21 ENDC/PV. 371, 28 Feb. 1968, para. 24.

22 A/C.1/PV. 1572, 22 May 1968, para. 13.



With respect to those suggestions more concerned with qualitative considerations, they mostly emanated from countries that have made significant progress in the field of nuclear energy. The following suggestions which were made by Switzerland, Spain, and Sweden were quite significant in-so-far that they reflected serious preoccupations.<sup>23</sup>

In its aide-mémoire to the ENDC, Switzerland expressed the view that it could only be a party to the Treaty if most of the Powers likely to possess nuclear weapons acceded to it. So long as that condition was not fulfilled, the Treaty would contain a gap endangering the security of the small States on which it would be binding. Moreover, Switzerland was of the view that the non-accession of important industrial Powers might be economically prejudicial to the competitive capacity of the atomic industry of the signatory States.<sup>24</sup>

For Spain, the important question was not merely the number of ratifying countries, but the nuclear characteristics of the countries whose signature and ratification would help to put the Treaty into force. Therefore, it deemed it advisable to require that among sixty ratifying countries there should be at least 12 countries which possessed nuclear power reactors in operation and construction, or else possessed within their territories uranium deposits which had been proved economically exploitable.<sup>25</sup>

Apart from general security and economic considerations,

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23 It is interesting to note that by 1 June 1974, none of these three States were full-fledged parties to the NPT. Spain had not yet signed the Treaty; Switzerland signed but had not ratified; and Sweden ratified but had not yet concluded the safeguards agreement required by Article III. By the end of 1979 only Spain had remained uncommitted.

24 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 21 (ENDC/204, 24 Nov. 1967), para. 4.

25 Ibid., Sec. 35 (ENDC/219, 27 Feb. 1968). See also A/C.1/PV. 1569 (prov.), 16 May 1968, pp. 86-87.

the Swedish representative at the ENDC also raised regional security considerations. Commenting on the provisions of Article IX of the identical treaty drafts of January 1968, Mrs. Alva Myrdal noted that no account was taken of the special importance which some prospective parties to the treaty might attach to the more or less simultaneous adherence by another State or several other States. In her view, regional preoccupations might come to play an important role in this process of decision-making, as well as fears of uneven commercial competition if some States adhered and some not, some under an inspection agreement already settled and some with that issue still open. The Swedish representative wondered whether this problem could be taken care of by allowing a State to make a reservation in its instrument of ratification to the effect that the Treaty should not enter into force or remain in force for its part until and unless it entered into force and remained in force for another State or States, which would then have to be specified in the same document.<sup>26</sup>

All these quantitative and qualitative suggestions failed to dissuade the co-drafters of the Treaty, i.e., the Soviet Union and the United States, from going ahead with their original proposition. In explaining their position, the US representatives at the ENDC repeated once more that the number forty was selected in order to ensure that, when the treaty came into force, it would begin without dangerous delay to achieve its purpose of halting proliferation. The experience under the Test-Ban Treaty was recalled as considerably relevant. Based on this experience, it was expected that forty ratifications would require as least one year between the date of opening the NPT for signature and the date of its entry into force. It was believed that an increase in the number would create an unnecessary delay, involving an unacceptable

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<sup>26</sup> ENDC/PV. 363, 8 Feb. 1968, paras. 28-30.

risk of further proliferation.<sup>27</sup> In particular, it was feared that the Nigerian suggestion for a number equivalent to the majority of the membership of the United Nations could possibly delay as much as two years the entry into force of the Treaty after it was opened for signature.<sup>28</sup>

Moreover, the US representative explained that his country had considered possibilities for establishing some qualitative rather than numerical standard for the countries whose ratification would be required for the treaty's entry into force. However, no practical standard was found to be free from controversy or ambiguity in its application. It was pointed out that the most serious difficulty often found in this type of approach was that it would provide a veto power over the treaty's entry into force to each and every one of the countries coming within the standard proposed.<sup>29</sup>

Lastly, in answering Sweden on the question of reservations, the US representative explained that the potential parties to the treaty "have every right to time the deposit of their instruments of ratification or accession so as to take into account the actions of other States. This need not, therefore, delay action by governments in completing the process of ratifying the treaty in accordance with their constitutional procedures. Once these national decisions have been taken, it should not be difficult to arrange through diplomatic channels for parallel deposits of the instruments of ratification by the governments concerned."<sup>30</sup>

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27 ENDC/PV. 369, 22 Feb. 1968, para. 62. Both the United Kingdom and Canada also defended the number forty. ENDC/PV. 358, 23 Jan. 1968, paras. 29 and 40 respectively.

28 ENDC/PV. 378, 13 Mar. 1968, para. 15.

29 ENDC/PV. 369, 22 Feb. 1968, para. 63.

30 ENDC/PV. 368, 21 Feb. 1968, paras. 50-51. This view was reiterated once more in ENDC/PV. 369, 22 Feb. 1968, para. 63.

To sum up, the definite provisions for the entry into force of the Treaty prescribed the ratification by the States, the Governments of which are designated Depositaries of the Treaty, and forty other States signatory to the Treaty and the deposit of their instruments of ratifications. From the date the Treaty was opened for signature on 1 July 1968 it took over twenty months, and not one year as previously expected, for its entry into force on 5 March 1970 when it had been ratified by 47 States including the Soviet Union, the United Kingdom and the United States.<sup>31</sup> As of 1 January 1980, 112 States were Party to the NPT. The main absentees were China and France, as well as an impressive number of so-called potential or threshold nuclear-weapon States, which we are going to identify further below. The case of these two categories of States and the impact of their abstention on the effectiveness of the Treaty ought now to be assessed.

## II. The Case of France and China

There is a high degree of similarity in the French and Chinese motivations for developing national nuclear forces as the marks of national greatness, political power and importance, and independence from the hegemony of the two super-Powers.<sup>32</sup>

On issues of arms control and disarmament they also hold similar positions. To cite only few examples, both had refused to participate in the work of the CCD, and France had precedingly refused to occupy its seat at the ENDC. Now that France has joined in 1979 the newly established CD, China may follow. Both have refused to adhere to the 1963 Test-Ban Treaty, the adherence to which would have virtually prevented or hampered France from developing its nascent nuclear

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31 See Chapter 3.

32 For an excellent comparison of the positions of the two countries, see B.W. Augenstein, "The Chinese and French Programs for the Development of National Nuclear Forces", Orbis, Vol. XI, No. 3, Fall 1967, pp. 846-863.

force and China from creating its own. Both have also refused to adhere to the NPT, although the Treaty recognises their privileged status as nuclear-weapon States on equal footing with the Soviet Union, the United Kingdom and the United States, who are all unrestricted in developing their own nuclear forces.<sup>33</sup> Does their refusal in the latter case imply their unwillingness to undertake not to proliferate nuclear weapons to other countries? To put it differently, is there a possibility that both countries would actively contribute to the proliferation of these weapons or at least would serve as an example for other nuclear-weapon aspirants to follow their path? No simple answer can satisfy these questions and a differentiation has to be made in this respect, for purposes of clarity, between the positions of France and China.

#### 1. France

The French position on the NPT is a reflection of the remarkable consistency of the French disarmament policy since the end of the Second World War.<sup>34</sup> Four broad though overlapping phases in this disarmament policy can be distinguished. The first phase ran from 1945 until 1957, during which France sought to occupy an intermediary position between the United States and the Soviet Union. The objective was not so much to prevent an agreement between the two super-Powers at the expense of the rest, but to assert France's role as a major Power. French weakness after the

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33 It is also quite remarkable that in the "Declaration on Atlantic Relations" adopted in Ottawa on 19 June 1974 by the North Atlantic Council Ministerial Meeting, the nuclear forces of France and the United Kingdom were recognised for the first time by their partners in NATO and, more particularly, by the United States as being "capable of playing a deterrent role of their own contributing to the overall strengthening of the deterrence of the Alliance." DOSB, Vol. LXXI, No. 1828, 8 July 1974, pp. 42-44, para. 6.

34 The following is drawn from the succinct analysis made by Wolf Mendl, op.cit., pp. 218-223.

war made the field of disarmament negotiations a particularly appropriate area of national initiatives. France consistently set, however, two conditions as a sine qua non of her participation in any disarmament agreement. The agreement must not discriminate between one group of Powers and another and it must mark a "genuine" step forward in the direction of universal disarmament.

The emphasis on equal treatment in the sphere of disarmament and arms control became much more explicit during the second phase which ran from 1957 until 1962, which marked the rise and consolidation of Gaullist power. The fear that the Anglo-Saxon Powers and the Soviet Union might make a deal at the expenses of France and other non-nuclear Powers and thus reduce them to a permanent status of inferiority ran persistently through the declarations of French leaders during this phase. France opposed, in fact, any arms control policies which threatened the military development of its atomic energy programme.

The third phase in French disarmament policy began in 1962, when France refused to participate in the ENDC, and it criticised its composition because it included a number of non-nuclear Powers.<sup>35</sup> In the following year, when the Test-Ban Treaty was signed, President de Gaulle, while welcoming the Treaty in a speech in Lyon said that "France which does not admit that two States should alone possess power and domination once and for all and forever, France will continue the effort that she has begun for her security and for that of the allied peoples."<sup>36</sup> In an earlier news conference de Gaulle expressed France's readiness to stop its nuclear-weapon programme if it would be possible to disarm those who had nuclear weapons rather than to forbid them to those who did not

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<sup>35</sup> See Chapter 3.

<sup>36</sup> The New York Times, 29 Sept. 1963.

have them.<sup>37</sup> This kind of reasoning remained the main theme of French official declarations with regard to the efforts to halt the proliferation of nuclear weapons. For example, in a French radio interview in January 1967 Couve de Murville, the then French Foreign Minister, said the following :

"Proliferation is assuredly a problem ... But there is something much more important, which is that those who possess nuclear weapons should make no more and destroy those that they have ... One should not lead the world to believe there is disarmament where there is in fact only the consolidation of super-powers' monopoly ... I do not wish to believe that it is less dangerous for a great power like the United States, Soviet Russia, and later China, to have the power to destroy the world than to see some small countries possess nuclear weapons which would scarcely be capable of reaching their immediate neighbours."<sup>38</sup>

France's view point is similar to the views expressed by the non-nuclear-weapon States who criticised the NPT for not putting an end to the vertical proliferation of nuclear weapons.<sup>39</sup> France's force de frappe would have not been affected by its adherence to the NPT, but its consistent policy against the monopoly and hegemony of the two super-Powers has remained unaltered. On the other hand, France argues that the spread of nuclear weapons to more countries increases the danger of the outbreak of nuclear war because of irresponsibility or accident, but in the logic of its own position in creating and

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37 Ibid., 30 July 1963.

38 Le Monde, 8-9 Jan. 1967 (translation provided in Elizabeth Young, A Farewell to Arms Control ?, p. 58). For other similar statements made by Couve de Murville, see, for example, GAOR, 20th Sess., Plenary Meetings, 1341st plen. mtg, 29 Sept. 1965, paras. 105-106; and La Documentation française, "La politique étrangère de la France. Textes et documents. 1966", Notes et études documentaires, Nos. 3384 à 3387, 29 Avr. 1967, p. 198 and "La politique étrangère de la France. Textes et documents. 1er semestre 1967", Ibid., Nos. 3428 à 3430, 24 Oct. 1967, pp. 53-54.

39 See Chapter 9.

maintaining its force de frappe, has not been able to seriously object to any State acquiring nuclear weapons through its own efforts.<sup>40</sup> It should be recalled, however, that France strongly objected to the MLF, inter alia, for fear that the Federal Republic of Germany would get a finger on the nuclear trigger and that its participation in the force would whet its appetite for the acquisition of nuclear weapons.<sup>41</sup>

The culminating point in the French position on the NPT was on the occasion of the vote casted by the UN General Assembly on the resolution commending the Treaty. In explaining the abstention of France from voting on the resolution, the French delegate made the following significant statement :

"France, for its part, which will not sign the non-proliferation treaty, will behave in the future in this field exactly as the States adhering to the treaty. There is certainly no doubt in that respect in the mind of anyone.

But the real question is not that. Nor can it be the mere confirmation by the international community of the monopoly of the Powers which at this time happen to possess this capability. The real question is ... the complete disappearance of nuclear weapons."<sup>42</sup> (Emphasis added.)

The above underlined unilateral declaration carries a certain weight, but it certainly does not amount to a legal obligation. Moreover, it is not quite clear whether France's behaviour in the future will be restricted to the non-transfer of nuclear weapons to any recipient whatsoever and the abstention from assisting any non-nuclear-weapon State in the manufacture of nuclear weapons, or whether it would also extend to

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40 See Wolf Mendl, op.cit., p. 223. France voted in favour of a resolution on non-proliferation adopted by the UN General Assembly in 1966. GA Res. 2149(XXI). 4 Nov. 1966 in GAOR, 21st Sess., Suppl. No. 16 (A/6316), p. 9.

41 See Chapter 4.

42 A/PV. 1672 (prov.), 12 June 1968, p. 6.



the requirement of international safeguards on all nuclear material and equipment which it may provide to any non-nuclear-weapon State, whether a party or not to the NPT. The latter question is quite pertinent since France helped Israel in setting a 24 MW(th) nuclear research reactor at Dimona in the northern Negev, which is not even subject to any French controls.<sup>43</sup>

Dimona was a by-product of the Suez crisis of 1956. Frustrated by the outcome of the tripartite conspiracy against Egypt, France and Israel cemented their nuclear co-operation by an agreement in 1957 to set up the Dimona reactor. In fact, French-Israeli co-operation in the atomic field dates back to the first half of 1953 when France and Israel concluded an agreement for co-operation in atomic research, an agreement which was not made public until November 1954. French interest in such co-operation was mainly motivated by the success of the Israeli researchers in two domains; the processing of natural uranium from phosphates, and the development of a cheaper method for the production of heavy water needed for French nuclear reactors, a method which was not based on electric power such as that produced in Norway through hydro-electric power. In exchange, the Israelis gained access to a large part of French atomic knowledge and installations.<sup>44</sup>

Significantly, Israel was the only country to maintain a permanent liaison organ with the French Commissariat à l'Énergie atomique and again the only one to have had a permanent mission at the French Ministry of National Defence.

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43 Leonard Beaton and John Maddox, The Spread of Nuclear Weapons (London : Chatto and Windus, 1962), p. 172. On the Dimona reactor see Jabber, Israel and Nuclear Weapons, Chapter III, pp. 33-41.

44 Ibid., pp. 17 and 20-24. With regard to the purchase by France of the patent of the Israeli method for the production of heavy water, see Bertrand Goldschmidt, Les rivalités atomiques, 1939-1966 (Paris: Fayard, 1967), pp. 197-198.

However, this relationship has apparently been seriously impaired by the new orientation given to French policy towards the Middle East by General de Gaulle and pursued by his successors.<sup>45</sup> Moreover, as a result of this new orientation, it is considered most unlikely that France had the chance to provide for plutonium separation from the spent fuel of the Dimona reactor, a task which occasional reports had suggested that the Dimona agreement might have provided for.<sup>46</sup>

However, if close nuclear co-operation between France and Israel is still taking place France would be expected, as in any similar co-operation with any other non-nuclear-weapon State, to honour its unilateral undertaking to behave in the future "exactly" as the States adhering to the NPT, including the requirement of the application of international safeguards on all nuclear assistance rendered to any non-nuclear-weapon State including Israel.

By stopping nuclear-weapon testing in the atmosphere as of 1975, France has entered into a new phase. However, it is continuing with its underground testing and has resisted in international forums appeals for a comprehensive test ban.

Following the examples of the United States and the Soviet Union, France has signed an agreement with Euratom and the IAEA on 27 July 1978 for the application of safeguards to certain nuclear material and facilities in France.

France's increasing co-operation with a number of non-nuclear-weapon States in the field of peaceful uses of nuclear energy, such as with Pakistan and Iraq, brought great pressure to bear upon her from several countries, especially from the United States because of the "sensitivity" of the equipment and/or material involved, or for the lack of a full-scope safeguards' requirement.

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<sup>45</sup> Jabber, Israel and Nuclear Weapons, p. 49.

<sup>46</sup> Ibid., p. 78.

The participation of France as of 1979 in the newly established CD in Geneva, after so many years of self-imposed isolation, is a significant step on the part of France as well as to the world disarmament community at large.<sup>47</sup>

To sum up, the French position on the problem of nuclear proliferation is twofold; on the one hand, to assert its status as a major Power by acquiring itself the nuclear weapons and on the other hand, to assure its national security by emphasising the importance of non-proliferation of nuclear weapons to other countries and, more particularly, to Germany. However, it remains to be seen whether France has not really defeated the cause of non-proliferation by rendering in the past uncontrolled nuclear assistance to Israel.

## 2. China

In spite of the many similarities between the positions of France and China, the latter's declarations and statements were sometimes overtly in favour of the proliferation of nuclear weapons to other countries. These declarations and statements have led many analysts to believe that China would not only welcome and encourage such a prospect but would also actually share its nuclear knowledge with the friendly countries of the third world. This calls for an examination of China's real intentions and behaviour.<sup>48</sup>

During the early post-war period, "proliferation" meant to the Chinese Soviet development of nuclear weapons, and later their development by China, and possibly other Socialist

<sup>47</sup> See "The French Position on Disarmament" (French government statement, 23 Jan. 1978), Survival Vol. XX, No. 3, May/June 1978, pp. 127-129, and Pierre Lellouche, "France in The International Nuclear Energy Controversy: A New Policy Under Giscard d'Estaing," Orbis, Vol. 22, No. 4, Winter 1979, pp. 951-964.

<sup>48</sup> China's position on nuclear weapons and arms control has been extensively discussed in numerous works among which the following can be cited : Morton H. Halperin, China and the Bomb, op.cit.; Morton H. Halperin and Dwight H. Perkins, Communist China and Arms Control (New York : Praeger, 1965); Morton H. Halperin, China and Nuclear Proliferation

countries in order to break the nuclear monopoly of the United States. The Chinese also shared Soviet concern from the beginning of 1956-1957 with the possibility that the Federal Republic of Germany would ultimately acquire a nuclear-weapon capability. The Chinese were also in favour of a test ban only as leading to complete prohibition of the manufacture and use of nuclear weapons.<sup>49</sup>

Ever since the withdrawal in 1959 of the Soviet aid to the Chinese nuclear programme,<sup>50</sup> China began to see the proliferation issue as an attempt by the two super-Powers to prevent it from becoming a nuclear-weapon State. From 1959 to 1963 Chinese frustrations were muted and even some general support was given to Soviet positions which affected proliferation. But the 1963 Test-Ban Treaty dramatically brought to the surface these Chinese frustrations. In a statement issued on 15 August 1963, the Spokesman of the Chinese Government explained the following :

"It is not only at present (1963) that the Soviet leaders have begun to collude with U.S. imperialism and attempt to manacle China.

As far back as June 20, 1959, when there was not yet the slightest sign of a treaty on stopping nuclear tests, the Soviet Government unilaterally tore up the agreement on new technology for national defense concluded between China and the Soviet Union on October 15, 1957, and refused to

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(Chicago, Illinois : The University of Chicago, Center for Policy Study, 1966); Arthur Huck, The Security of China (London : Chatto and Windus, 1970); Oran Young, "Chinese Views on the Spread of Nuclear Weapons" in Sino-Soviet Relations and Arms Control (Vol. II). Collected Papers (Harvard University, Center for International Affairs, East-Asian Research Center, 1966) (Report to the U.S. Arms Control & Disarmament Agency); B.W. Augenstein, loc. cit.; and Harry Gelber, "Nuclear Weapons and Chinese Policy", The International Institute for Strategic Studies (London), Adelphi Papers, No. 99, Summer 1973.

49 See Halperin, China and Nuclear Proliferation, pp. 9-10.

50 See Chapter 1.

provide China with a sample of an atomic bomb and technical data concerning its manufacture. ... The Chinese Government sent three memoranda to the Soviet Government on September 3, 1963, October 20, 1962, and June 6, 1963, stating that it was a matter for the Soviet Government whether it committed itself to the United States to refrain from transferring nuclear weapons and technical information concerning their manufacture to China; but that the Chinese Government hoped the Soviet Government would not infringe on China's sovereign rights and act for China in assuming an obligation to refrain from manufacturing nuclear weapons. We solemnly stated that we would not tolerate the conclusion, in regard of China's opposition, of any sort of treaty between the Soviet Government and the United States which aimed at depriving the Chinese people of their right to take steps to resist the nuclear threats of U.S. imperialism, and that we would issue statements to make our position known."<sup>51</sup>

The Chinese opposition to the Test-Ban Treaty was mainly due to their need to develop their own nuclear capability. An analyst noted that "perhaps the major reason for their agitation about the actual signing of the treaty was that they foresaw the political effect it would have in Asia : A test ban treaty would diminish the political value of their explosion of a nuclear weapon; indeed, it had already served to brand them as outlaws interfering with the possibility of ending the atomic arms race."<sup>52</sup>

The Chinese presented a large number of other arguments against the Test-Ban Treaty : that it was an excuse for the Soviet Union not to share nuclear weapons with them; that it permitted underground tests and hence would permit the United States to proceed with its development of tactical nuclear weapons; that it would provide a means of establishing a "two-China" situation; that it was not real disarmament; and, fi-

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51 Peking Review, Vol. VI, No. 33, 16 Aug. 1963, pp. 14-15.

52 Halperin, China and the Bomb, pp. 62-63.

nally, that it was a form of détente between the United States and the Soviet Union.<sup>53</sup>

On the issue of nuclear proliferation, the above mentioned statement of 15 August 1963 contained the most extended Chinese treatment of this issue. The following parts are quite significant :

"With regard to preventing nuclear proliferation, the Chinese Government has always maintained that the arguments of the U.S. imperialists must not be echoed, but that a class analysis must be made. Whether or not nuclear weapons help peace depends on who possesses them. It is detrimental to peace if they are in the hands of imperialist countries; it helps peace if they are in the hands of socialist countries. It must not be said indiscriminately that the danger of nuclear war increases along with the increase in the number of nuclear powers. Nuclear weapons were first the monopoly of the United States. Later, the Soviet Union also came to possess them. Did the danger of nuclear war become greater or less when the number of nuclear powers increased from one to two ? We say it became less, not greater.

... So long as the imperialists refuse to ban nuclear weapons, the greater the number of socialist countries possessing them, the better the guarantee of world peace. A fierce class struggle is now going on in the world. In this struggle, the greater the strength of our side, the better.<sup>54</sup> Does it make sense to say the less the better ?"

Following their first nuclear detonation on 16 October 1964, the Chinese tended to be extremely cautious apparently in an effort to present a picture of China as a reasonable country which could be trusted with nuclear weapons and whose nuclear capability should not be preempted. During this period the Chinese tended to de-emphasise the issue of nuclear proliferation and to avoid explicit statements of support for the spread of nuclear weapons. However, they did in general reassert their belief that the spread of nuclear weapons was

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<sup>53</sup> Ibid., p. 63.

<sup>54</sup> Peking Review, Vol. VI, No. 33, 16 Aug. 1963, pp. 12-13.

inevitable and had to occur before nuclear weapons could be eliminated.<sup>55</sup>

Following the second nuclear detonation of 14 May 1965 the Chinese became less concerned with the danger of a preemptive attack on their nuclear installations and, hence, began to revive their discussion of the nuclear proliferation issue.<sup>56</sup> This time, however, the Chinese made a distinction between favouring nuclear proliferation to other countries and themselves helping these countries to acquire a nuclear-weapon capability. In a press conference, Chen Yi, the Chinese Vice-Premier, said that :

"There are two aspects to the question of nuclear co-operation. As for the peaceful use of atomic energy and the building of atomic reactors, China has already been approached by several countries, and China is ready to render them assistance; as for the request for China's help in the manufacture of atom bombs, this question is not realistic. ... China hopes that Afro-Asian countries will be able to make atom bombs themselves, and it would be better for a greater number of countries to come into possession of atom bombs."<sup>57</sup> (Emphasis added.)

For several Afro-Asian countries, the Chinese detonation of a nuclear device in October 1964 was a success for the third world. For example, President Sukarno of Indonesia was reported to have said "(n)ow one of us has an atomic bomb."<sup>58</sup> As well put by one writer "(a)ll previous atomic testing has been carried out by industrial powers of the Occident; Communist China is non-Western, non-white and only semi-industrialized."<sup>59</sup>

55 Halperin, China and Nuclear Proliferation, p. 14.

56 Ibid., pp. 14-15.

57 Peking Review, Vol. VIII, No. 41, 8 Oct. 1965, p. 8.

58 The New York Times, 19 Apr. 1965. For other favourable reactions among statesmen of the third world, see "World Reactions to the Chinese Nuclear Bomb", Foreign Affairs Reports, Vol. XIV, No. 1, Jan. 1965, p. 12.

59 Ralph L. Powell, "China's Bomb : Exploitation and React-

The Chen Yi public statement with regard to helping other countries in the manufacture of nuclear weapons was in concert with the private attitude of the Chinese, at least in the following significant instance.

Mohamed Hassanein Heikal, a leading Egyptian journalist and a confidant of President Nasser of Egypt, reported that Nasser was enthusiastic about China's atomic success. He looked on it as a triumph for the East. In answer to Nasser's congratulations, Premier Chou En-Lai said that China would not be like others and try to keep a monopoly on its scientific achievements but would throw its knowledge open to everyone. After the 1967 Middle-East war and the fear of the Israeli threat to develop atomic weapons, President Nasser wrote to Chou En-Lai reminding him of his promise to share China's nuclear knowledge, and he sent a delegation from Egypt's nuclear authority to China to ask for help in making a break-through in nuclear techniques. Chou En-Lai received the members of the delegation kindly. His advice to them was simple and, he said, he wanted it conveyed to President Nasser. Self-reliance was his message. Nobody was going to give anybody anything as a gift. If the Egyptians wanted to step into the atomic field, they would have to do it themselves. This was the way China had done it and it was the best way. The Egyptian delegation came home empty-handed, and while there were no hard feelings against the Chinese, there was disappointment that they had not helped Egypt with their nuclear knowledge.<sup>60</sup>

This experience demonstrated that China at that time was not even ready to render assistance in the field of the peace-

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ions", Foreign Affairs, Vol. 43, No. 4, July 1965, p. 615. For other similar comments, see William Foster, "New Directions in Arms Control and Disarmament", p. 588 and Mazrui, loc.cit., p. 820.

60 Mohamed Hassanein Heikal, The Cairo Documents, The Inside Story of Nasser and His Relationship With World Leaders, Rebels, and Statesmen (Garden City, New York : Doubleday, 1973), pp. 304-305 and 312-313.



ful uses of nuclear energy either because it wished to concentrate first on its own nascent nuclear programme or because it really wanted to avoid contributing to the creating of nuclear-weapon options around the world, or both.

But if China was not in favour of contributing itself to the proliferation of nuclear weapons, as could be deduced at least from the 1965 Chen Yi statement, it continued throughout 1965 and 1966 to emphasise publicly the importance of spreading nuclear weapons to prevent nuclear blackmail and to obtain nuclear disarmament. Running consistently through the Chinese public statements during this period was the notion that the attempt to prevent proliferation was part of Soviet-American effort to dominate the world and that proliferation was in fact desirable as it would increase the deterrence of American nuclear attack and hasten the day when nuclear weapons could be eliminated.<sup>61</sup>

The Chinese were, in fact, not as nearly as preoccupied as were Western and Soviet analysts with the possibility of accidental or inadvertant war, or catalytic war as a consequence of further proliferation. The Chinese had been much more concerned with the possibility of a deliberate nuclear attack, and their ascendancy to nuclear-weapon status was, inter alia, to deter such an attack. Moreover and contrary to a view spread by the Soviet Union and some public officials in the West, the Chinese did not believe that nuclear war was inevitable.<sup>62</sup> It is also to be noted that China's declaration on the occasion of its first detonation of an atomic device that "at no time and in no circumstances will (it) be the first to use nuclear weapons" was repeated or referred to almost each time China exploded a nuclear device.<sup>63</sup>

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61 Halperin, China and Nuclear Proliferation, pp. 15-16.

62 For a brief analysis of Chinese doctrine on the causes and nature of nuclear war, see Ibid., pp. 17-32.

63 See Chapter 8.

China's public support for nuclear proliferation waned since 1967. The Chinese statements on the NPT merely denounced US-Soviet nuclear monopoly and blackmail. On the occasion of the presentation of the identical NPT drafts of August 1967, a Chinese commentator was of the view that "Washington and Moscow had to come up with the treaty in the hope of using it as a means of agitation against China and to contain socialist China's influence abroad ... Obviously, the U.S. imperialists and Soviet revisionists concocted the treaty to put all non-nuclear countries in a subordinate position, that of being 'protectorates', so that they may maintain their special status as big nuclear powers and remain 'nuclear overlords'." <sup>64</sup> Similar comments were made on the occasion of the Security Council resolution 255 on security guarantees as well as on the opening of the NPT for signature. <sup>65</sup>

Chinese consistent policy against the Test-Ban Treaty and the NPT was once more manifested on the occasion of China's signature of Additional Protocol II of the Treaty of Tlatelolco. The statement of the Chinese Government issued on that occasion said that "China is developing nuclear weapons solely because she is compelled to do so, and she is developing them entirely for defensive purposes as well as for breaking the nuclear monopoly and proceeding from there to the elimination of nuclear weapons." <sup>66</sup>

China's present abstention from publicly supporting nuclear proliferation may have emanated from a realistic appreciation that if proliferation may on the short-run reduce American-Soviet influence in the world and increase the likelihood of violent change in the third world, it may on the long-

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64 See Peking Review, Vol. 10, No. 37, 8 Sept. 1967, p. 34.

65 Ibid., Vol. 11, No. 25, 21 June 1968, pp. 17-18 and No. 28, 12 July 1968, pp. 5-6.

66 UN Doc. A/9137, 30 Aug. 1973, p. 2.

run pose a threat to Chinese anti-imperialist leadership as well as to its security, especially if nuclear weapons were acquired by rival countries in the Asian theatre. Most significant is the lack of immediate Chinese official reactions to the underground detonation of a nuclear device by India on 18 May 1974. Japan's attitude on the issue of nuclear proliferation, especially after the Indian detonation, is most probably followed in Peking with keen interest, if not with certain concern.<sup>67</sup>

In the last analysis, there is no evidence so far to indicate that China would proliferate nuclear weapons to other countries. Its verbal support for proliferation has even ceased. Its attitude with regard to the NPT should not be interpreted as favouring proliferation. Its attitude is very similar to the one taken by several countries who view the Treaty as an instrument failing to put an end to the nuclear arms race and the nuclear hegemony of the two super-Powers. China's dramatic "rapprochement" with the United States in 1972 and the settlement of the issue of Chinese representation at the United Nations the year before, as well as China's positive support for the prohibition of nuclear weapons in Latin America are important factors not to be neglected in assessing future Chinese course on the issue of nuclear proliferation. However, the Indian nuclear explosion may once more reactivate

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<sup>67</sup> The Indian and Japanese positions on nuclear proliferation are treated below. During the early Chinese post-detonation period, some analysts entertained the thought that China would likely see some benefits in a nuclear-weapon India or Japan, e.g., the weakening of the central government in India, the weakening of its economy, the disruption of its political structures and the destruction of Indian prestige as a leader of an Afro-Asian bloc. In the case of Japan, a threat to Soviet security interests and a split in American-Japanese relations were considered as plausible results. See Halperin, China and Nuclear Proliferation, pp. 36-42. See also Oran Young, "Chinese Views on the Spread of Nuclear Weapons", pp. 59-61 and 64-67.

the issue of whether or not China would help Pakistan, for example, in the manufacture of nuclear weapons or extend a nuclear umbrella to that particular country.

To conclude, the danger of the further proliferation of nuclear weapons does not reside, in fact, in the possibility that both France and China would actually help others in acquiring these lethal weapons. It rather resides in the possibility that both countries may serve, for security and prestige reasons, as an example for other countries to follow, especially the so-called threshold or potential nuclear-weapon Powers.

### III. Potential Nuclear-Weapon Powers

In spite of the severe criticism that the NPT had been subject to during the successive phases of its formulation, it was finally commended by quite a large majority of the States Members of the UN General Assembly (94 in favour, 4 against and 21 abstentions).<sup>68</sup> As of 1 January 1980, 109 non-nuclear-weapon States representing more than two-thirds of the UN membership had ratified or acceded to the NPT. Moreover, as pointed out in Chapter 10, 76 non-nuclear-weapon States had concluded the required safeguards agreements of which 64 had been in force.<sup>69</sup>

In view of the above figures, the NPT is still far away from accomplishing its universal character. Most important is that a great number of the so-called threshold or potential nuclear-weapon Powers has not yet adhered to the Treaty. The Treaty is, in fact, particularly addressed to these States whose adherence is essential for its effectiveness and durability.

The potential nuclear-weapon Powers are usually identified and classified into categories, according to their capa-

<sup>68</sup> For the detailed results of the vote, see A/PV. 1672 (prov.), 12 June 1968, pp. 28-30.

<sup>69</sup> See Appendix 26.

bilities for establishing nuclear-weapon forces if they so decided.<sup>70</sup> The report of the UN Secretary-General on the "Effects of the Possible Use of Nuclear Weapons ..." <sup>71</sup> reached the conclusion that six States other than the five nuclear-weapon States appeared capable of finding the necessary resources to develop a small, high-quality nuclear force consisting at the end of the first 5-year period of 15-20 nuclear weapons and 10-15 bombers, and including at the end of the 10-year period 20-30 thermonuclear weapons, 100 IRBMs and 2 missile-launching nuclear submarines. The report estimated that such a force would cost about \$ 5,600 million over the 10-year period. A modest nuclear-weapon capability consisting of 100 plutonium warheads, 30-50 jet bomber aircrafts and 50 medium-range missiles in soft emplacements was said to cost about \$ 1,700 over 10 years. The six States which can afford the cost of the small, high-quality nuclear force are, as can be deduced from the report, Canada, the Federal Republic of Germany, India, Italy, Poland and Sweden.<sup>72</sup> About 20 more countries were said to be theoretically able to afford the cheaper, modest nuclear capability. Among these countries the following States can be identified : Argentina, Australia, Belgium, Brazil, Israel, Japan, the Netherlands, Pakistan, South Africa, Spain, Switzerland and the UAR (Egypt).

The report makes, however, two observations. The first is that the cost would be much higher for a developing State lacking the necessary industrial base plus the risk of increasing costs due to the inherent mechanism of the arms race. Secondly, the manpower requirements in scientists and technicians would probably be more damaging than the direct economic costs. On

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70 See Chapter I, note 81.

71 Effects of the Possible Use of Nuclear Weapons, Chapter II.

72 The report does not mention these countries by name, but they are easily identifiable by comparing figure VIII in Chapter II of the report with table 11 of Annex IV of the same document.

the other hand, the report warns that costs are decreasing as the technology of manufacturing nuclear weapons becomes better known and as large-scale nuclear power development would make it cheaper and easier to produce weapons-grade plutonium.<sup>73</sup>

The capability to establish a nuclear-weapon force, whether rudimentary or substantial, is certainly not the decisive factor that a country would weigh before embarking on acquiring such a force. The proposition that "(s)o far, no country has resisted the temptation to make its own atomic weapon once it has acquired the physical ability to do so"<sup>74</sup> is rather simplistic.

After having discussed the capability aspects of potential nuclear-weapon proliferation, the report of the UN Secretary-General rightly examines the incentives for proliferation, which are the real decisive factors, regardless of the economic strains or sacrifices.<sup>75</sup> The main incentives tackled by the consultative group of experts appointed by the Secretary-General are the achievement of a state of mutual deterrence with others, the use of tactical nuclear weapons and prestige.<sup>76</sup> To these incentives should be added the economic development argument used by Brazil, India and others for the acquisition of nuclear explosive devices for peaceful purposes.<sup>77</sup>

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73 Ibid., para. 77.

74 Dennis Healey, The Race Against the H-Bomb (London : Fabian Society, Tract Series No. 322, Mar. 1960), p. 3.

75 As explained by the Nigerian representative at the ENDC "economic sacrifices ... could never constitute the principle disincentive for those who ... decide that they would need nuclear weapons or nuclear explosive devices to defend their political or economic interests respectively." ENDC/PV. 371, 28 Feb. 1968, para. 26.

76 Effects of the Possible Use of Nuclear Weapons, Chapter III.

77 See Chapter 5 and 7 of this study. The incentives mentioned above will be reverted to with respect to the specific cases treated below.

Among the potential nuclear-weapon Powers mentioned above, only Australia, Belgium, Canada, the FRG, Italy, Japan, the Netherlands, Poland and Sweden had ratified the Treaty. Egypt had merely signed it. The remaining States did not even sign the Treaty; namely Argentina, Brazil, India, Israel, Pakistan, South Africa and Spain. Three States among the latter group are all in areas of political tension and are operating without safeguards nuclear plants capable of producing materials for nuclear explosions; namely India, Israel and South Africa. A fourth country, Pakistan, is reported to be building a centrifuge plant that will produce enriched uranium, also without safeguards.<sup>78</sup>

It is beyond the scope of this study to make a case study of the position of each of these potential nuclear-weapon Powers on the NPT and of its capabilities and incentives or disincentives for acquiring nuclear weapons or other nuclear explosive devices.<sup>79</sup> After all, throughout this study the positions of those States and many others with regard to the several aspects of the NPT have been thoroughly discussed and analysed. Moreover, in several parts of the world the danger of nuclear proliferation appears for the time being to have been averted or at least to be receding.

In the Northern hemisphere, Canada is not only resolved against acquiring itself nuclear weapons but is also requiring

78 NPT/CONF.II/PC.II/7, 25 July 1979, p. 7; and UN Doc. A/34/PV.52 (prov.), 5 Nov. 1979, pp. 12-13 (IAEA Director General of IAEA Sigvard Eklund).

79 Among the numerous general works on the problem of nuclear proliferation, the following recent works are particularly relevant to all or some of the above mentioned potential nuclear-weapon Powers: A World of Nuclear Powers?; The Near-Nuclear Countries and the NPT (Stockholm International Peace Research Institute); Quester, The Politics of Nuclear Proliferation; Nuclear Proliferation Problems; and Ernest W. Lefever, Nuclear Arms in the Third World. U.S. Policy Dilemma (Washington, D.C.: The Brookings Institution, 1979). For case studies on each potential nuclear-weapon Powers, they will be occasionally referred to in the course of the analysis undertaken below.

international safeguards on all nuclear material furnished by it to any other State.<sup>80</sup>

In the Southern hemisphere, the Latin American States succeeded in concluding the Treaty of Tlatelolco for the prohibition of nuclear weapons in their part of the world.

In Europe, East and West have been engaged in two major negotiations concerning the security of their continent, i.e., the Conference on European Security and Co-operation (CESC) and the Conference on Mutual and Balanced Force Reductions (MBFR). The successful conclusion of the safeguards agreement between Euratom and the IAEA had led to the ratification of the NPT not only of all non-nuclear-weapon States Members of the European Communities but also of other countries of Europe such as Sweden and Switzerland.

In Africa, where the efforts for denuclearization preceded those of the Latin American countries, the majority of the States had already ratified or acceded to the NPT,<sup>81</sup> in spite of the uncertain attitude of South Africa.

However, two regions of the world remain a source of serious concern; namely Asia and the Middle East. In the former, almost ten years after the first detonation of a Chinese nuclear device, India carried out on 18 May 1974 its first "peaceful nuclear explosion experiment". In the Middle East, the ambiguous attitude of Israel with regard to the NPT and the secrecy surrounding its nuclear activities, especially with regard to the Dimona reactor, continue to raise speculations on whether or not Israel has produced the bomb. The two countries have always been the "classical" cases studied and analysed by all those concerned and worried about future

80 See Sherman, Nuclear Proliferation, Chapter 3; Peyton V. Lyon, Canada in World Affairs, 1961-1963 (Toronto, Ontario : Oxford University Press, 1968), Chapter 3; and John E. Mueller, "Incentives for Restraint : Canada as a Non-Nuclear Power", Orbis, Vol. XI, No. 3, Fall 1967, pp. 864-884.

81 It is even to be noted that among the States which abstained from voting on the UN General Assembly resolution commending the NPT were two African States which later ratified the Treaty (Burundi and the Central African Republic).



proliferation. Nuclear proliferation in Asia and the Middle East may not only have adverse effects in these two regions but may also affect or upset the relative stability painfully attained in other parts of the world. Hence, the study of the attitudes of India and Israel as focal points is crucial if an assessment is to be made of their impact on future proliferation, and consequently on the effectiveness and viability of the NPT.

### 1. India

India's detonation of a nuclear device on 18 May 1974 put an end to the speculations on whether and when India would attain a nuclear-explosive capability. However, the May event would certainly continue to raise speculations about India's real intentions and ambitions, regardless of the Indian official statements and declarations against the military uses of nuclear explosives. The first official announcement read as follows:

"The Atomic Energy Commission, Government of India, announced today that it carried out a peaceful nuclear explosion experiment using an implosion device. The explosion was carried out at a depth of more than 100 metres.

As part of the programme of study of peaceful uses of nuclear explosion, the Government of India had undertaken a programme to keep itself abreast of developments in this technology, particularly with reference to its use in the field of mining and earth-moving operations.

The Atomic Energy Commission, Government of India, also stated that India had no intention of producing nuclear weapons, and reiterated its strong opposition to military uses of nuclear explosions."<sup>82</sup>

The site of the nuclear explosion was in the Pokaran range of hills in the western part of the Rajasthan desert, about 90 miles from the border with Pakistan. The explosion was equivalent to 10,000 to 15,000 tons of TNT. No significant radiation was detected after the explosion. India claimed to have spent no more than £160,000 on the Rajasthan test. It is to be noted, however, that the Bhaba atomic research

<sup>82</sup> CDD/424, 23 May 1974. India has shown interest, for example, in oil stimulation, copper extraction and water supplies. Peaceful Nuclear Explosions (I), pp. 9-10.

centre at Trombay, near Bombay, had cost nearly £100 millions since 1957 of which 90 per cent had been devoted to nuclear power plants.

Throughout this study, India's objections to the NPT have been thoroughly examined. Foremost among these objections, which are mainly based on the discriminatory nature of the Treaty, is that the Treaty deprives the non-nuclear-weapon States of the right to manufacture nuclear explosive devices for peaceful purposes. Other countries such as Argentina and Brazil adopted similar attitudes on peaceful nuclear explosions.<sup>83</sup> However, in view of the advanced state of nuclear technology in India and its security preoccupations vis-à-vis China and Pakistan, India's objections to the NPT were looked upon with particular concern.

Among the countries of the third world, and in comparison with a number of industrialised countries of western Europe, India is the most advanced in nuclear technology. It appears to be heading for the acquisition of all the elements of an extended nuclear fuel cycle including uranium enrichment and the future fast breeder reactors. Indian scientists are also involved in advanced research on fusion techniques.

Briefly, India is at present known to have the greatest thorium reserves in the world, which are in particular to be found on the beaches of the State of Kerala, on the western coast of the country (thorium is extracted from the sand containing monazite). India is also reported to have more than 1,200 tons of natural uranium. At the time of the explosion, India had four research reactors in operation in Trombay among which a 40-MW(th) reactor, CIRUS, was built with some Canadian help and financing under the Colombo Plan for Co-operative Economic Development in South and South-East Asia. It began operating in 1960 and was not subject to any formal safeguards. The Indian Government merely "undertook" that CIRUS's by-products would be used for "peaceful purposes." For a 40-MW(th) reactor, these by-products were estimated to

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<sup>83</sup> See Chapter 5.

amount to about 40 grams of plutonium per day. As CIRUS was estimated to operate 250 days a year, a quantity of about 10 kilograms of plutonium would have been yielded annually.<sup>84</sup> It is probable that the plutonium used in the detonation of 18 May was extracted from the spent fuel of the CIRUS reactor. It should be noted, however, that the Canadian Government abstained from reaching a hasty conclusion in this respect and sought information from India on the source of plutonium used in the explosion. Pending clarification of the situation the Canadian Government had suspended shipment to India of nuclear equipment and material and had instructed the Atomic Energy of Canada Limited to suspend its co-operation with India nuclear reactor projects and the more general technological exchange arrangements which it had with the Indian Atomic Energy Commission. The Canadians had made it clear in international discussions and in bilateral exchanges with India that the creation of a nuclear explosion for "so-called peaceful purposes" could not be considered as a peaceful purpose within the meaning of their co-operative arrangements.<sup>85</sup>

The potential significance of the CIRUS reactor to the Indian nuclear-explosive programme is due to the fact that with regard to the other major research reactor, APSARA, the enriched uranium fuel elements have been provided by the United Kingdom under safeguards to ensure that no fissile by-products are diverted to weapons use. Moreover, the Indian power reactors in operation then were under IAEA safeguards, although the safeguards were at the beginning painstakingly restricted because of Indian resistance to the imposition of immediate safeguards. These power reactors are located in Tarapur, Maharashtra (2 units of a net output of 396 MW(e)), and in Rana Pratap Sagar, Rajasthan (2 units of a net output of 414 MW(e) one of which was still under construction in

84 See Sullivan III, loc. cit., p. 358.

85 See the text of the statement made by the Secretary of State for External Affairs of Canada on 22 May 1974 in CCD/426, 23 May 1974.

1974 and was expected to be operational in 1980). The former involved arrangements with International General Electric Company of the United States; the latter were built by the Canadians. The American reactors are burning enriched uranium.<sup>86</sup> The Indians have also been constructing indigenously a power reactor at Kalpakkam in Madras (2 units of a net output of 440 MW(e) expected to be operational in 1981 and 1983 respectively), as well as another power reactor at Narora in Uttar Pradesh (2 units of a net output of 440 MW(e) expected to be operational in 1984 and 1985 respectively). The latter reactors are pressurised heavy-water moderated and cooled reactors using natural uranium as a fuel, which would ensure self-sufficiency and avoidance of international safeguards.

The Indian plutonium is separated in a chemical separation plant in Trombay which has been in operation since January 1965. Under the aegis of the Indian Atomic Energy Commission, India has also been pursuing a modest space programme. Apart from the international centre for satellite-launching at Thumba, India has recently set up a new centre on the east coast, the SHAR (Sriharikota Range), which would allow the development of an indigenous Indian satellite-launching capability.<sup>87</sup>

Self-sufficiency as a goal to be pursued by India in developing its nuclear technology could therefore be easily discerned. Self-sufficiency is a basic political principle permeating the entirety of Indian economic, social, and political life. Although self-sufficiency is impossible to attain, it remains a goal permitting India to diminish its reliance on outside forces or Powers in the sensitive areas of economic development and national security.<sup>88</sup>

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86 For the safeguards arrangements concerning these power reactors, see Sullivan III, loc. cit., pp. 359-361.

87 For more details on the Indian programme, see The Near-Nuclear Countries and the NPT, pp. 16-19.

88 See Williams, op. cit., p. 21.

Until the early 1960s, economic development had dominated Indian thinking in the development of a national nuclear programme. However, the military potential of nuclear energy harnessed for peace had never been overlooked by Indian policy makers. Jawaharlal Nehru himself as early as 1946 stated that India would develop nuclear power exclusively for peaceful purposes, but he added that "so long as the world was constituted as it was, every country would have to develop and use the latest scientific devices for its 'protection.'"<sup>89</sup>

Ever since the first Chinese detonation of a nuclear device on 16 October 1964, the military potential of the Indian nuclear programme has become a central issue in the national debate on security. In 1964, India's security had been suffering from the serious blow of the 1962 border clash with China. To India the political and military resurgence of China was the most important new element in the changing international environment. The border clash with China challenged the validity of Nehru's assumption that a communist land Power would not be tempted to engage India militarily.<sup>90</sup> India therefore found itself in conflict not only with Pakistan, its traditional rival, but also with China. Complicating the situation further was the developing political relations between the latter two countries. With the continuation of nuclear testing by the Chinese, the Indian debate on whether or not to acquire nuclear weapons had been gaining in intensity.

After the Chinese detonation of 16 October 1964, the Indian Government headed by Lal Bahadur Shastri decided to forego nuclear weapons. The decision was based on four considerations: the economic effects of large expenditures on nuclear research and testing, the effects on India's policy of non-alignment and the reaction of other non-aligned States, India's heritage of non-violent philosophy, and the effects

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89 As quoted in Ibid., pp. 39-40.

90 Ibid., pp. 23-24.

on world peace and future disarmament talks.<sup>91</sup> Ever since this first governmental reaction, Indian officials had always maintained a firm stand against a nuclear-weapon capability for India. They had also moved away, after a period of reflexions and explorations, from foreign or international guarantees.<sup>92</sup> As the Chinese programme was gaining in strength and as the opposition parties were intensifying their campaign against the Government's inaction in the face of the threat to their country's security, Indian official statements had become increasingly qualified,<sup>93</sup> and sometimes categorically in favour of manufacturing nuclear explosive devices for peaceful purposes.<sup>94</sup>

Apart from the Indian National Congress party which in general supported the Government's policy against the acquisition of nuclear weapons or forming defence alliances with other countries, the other major parties while opposing the Government's policy differed with regard to the solutions to Indian security. On the right, the Bharatiya Jana Sangh (JS)

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91 Frank E. Cooper, "Indian Party Conflict on the Issue of Atomic Weapons", The Journal of Developing Areas, Vol. 3, No. 2, Jan. 1969, p. 192. See Shastri's statement on 24 November 1964 in the Lok Sabha debate in "India and the Bomb. Three Views", Survival, Vol. 7, No. 2, Mar.-Apr. 1965, p. 59.

92 See Chapter 8.

93 The Indian Government used to make statements such as: "The policy (on nuclear arms) is kept under constant review. In any such review, account has to be taken not only of the Chinese tests, but also other relevant factors, especially the progress made in discussions relating to nuclear disarmament." Frank E. Cooper, loc. cit., p. 204. Moreover, in an interview given in March 1973 to Mohamed Hassanein Heikal, Editor of the Egyptian newspaper Al Ahram, Mrs. Indira Gandhi, the Indian Prime Minister, while restating India's current decision not to make nuclear weapons, speculated on the possibility of its being compelled to go nuclear at a future date. K. Subrahmanyam, "Indian Attitudes Towards the NPT" in Nuclear Proliferation Problems, p. 260.

94 See, for example, the statement made by the Defence Minister of India before the Indian Parliament on 2 May 1972, previously referred to in Chapter 5.

demanding a nuclear deterrent for India. The Swatantra party urged the formation of a defensive alliance with the United States and/or the Soviet Union for additional security. Moving to the left, the Samyukta Socialist party (SSP) and the Praja Socialist party (PSP) favoured a nuclear-weapon capability for India. The Communist parties, both the pro-Moscow and the pro-Peking factions, were the only major parties to agree with the Government's policy.<sup>95</sup>

Public opinion surveys in India showed a considerable support to an Indian nuclear-weapon capability. According to the Institute of Public Opinion in New Delhi, in 1968 over 75 per cent of the Indian public was in favour of taking the decision to produce nuclear weapons.<sup>96</sup> Moreover, an interesting analysis of the élite view was made in an opinion survey carried out in Bombay, Calcutta, Delhi and Madras, which elicited the following response: 69 per cent answered in the affirmative to the question on whether they would like India to develop a nuclear capability for defence; 53 per cent stated that they were in favour of this even if it meant an increase in the tax burden, but 54 per cent were against India developing nuclear weapons if it meant a drastic cut in development expenditure. It was found that the higher the level of education of the respondents, the more favourable was the response for India acquiring nuclear weapons.<sup>97</sup>

In the Indian debate, those in favour of the acquisition of a nuclear-weapon capability had mainly argued that nuclear weapons would work as a deterrent to Chinese threats and

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95 For a succinct analysis of the positions of the leading Indian parties on the issue of nuclear weapons, see Frank E. Cooper, loc. cit. See also Thomas A. Rush, "Indian Socialists and the Nuclear Non-Proliferation Treaty", The Journal of Asian Studies, Vol. XXVIII, No. 4, Aug. 1969, pp. 755-770. For an earlier assessment of Indian parties' reaction to the Chinese bomb, see Sisir Gupta, "The Indian Dilemma" in Buchan (Ed.), A World of Nuclear Powers?, pp. 55-67.

96 Ashuk Kapur, "Nuclear Weapons and Indian Foreign Policy", The World Today, Vol. 27, No. 9, Sept. 1971, p. 381.

97 K. Subrahmanyam, loc. cit., p. 261.

nuclear blackmail and would make of India a world Power. The tactical uses of nuclear weapons were also invoked as an effective means of repelling a Chinese conventional attack.

The Indian Government's decision not to sign the NPT satisfied both those who did not want India to become a nuclear-weapon State but who were against the Treaty because of its discriminatory nature, and those who considered the Treaty incompatible with their aspirations for a nuclear-weapon India. The refusal to sign postponed therefore the issue and united all political factions in a unique manner. The conciliation between these domestic tendencies on the issue of an Indian nuclear-weapon capability might have been an element in the decision to carry out the "peaceful nuclear explosion experiment" of 18 May 1974. The detonation had certainly strengthened the position of those who had been advocating nuclear weapons for India.<sup>98</sup> In general, the May event generated a wave of jingoistic emotionalism which swept the country.<sup>99</sup>

Without questioning the sincerity of India's "peaceful" intentions and "strong opposition to military uses of nuclear explosions," the May event was doomed to be read differently by India's rivals as well as by other countries conscious of Indian security problems. It may also serve as an example to follow by nuclear-weapon aspirants in other politically and militarily unstable areas of the world.

In the Asian scene, although Chinese reactions were not forthcoming, a certain uneasiness with the Indian explosion could be felt.<sup>100</sup> On the one hand, condemning the test would have run counter to previous Chinese positions overtly in favour of nuclear proliferation. On the other hand, giving

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98 The working committee of the rightist party Jana Sangh called on the Government on 1 June 1974 to dissociate itself from the Test-Ban Treaty, which it had signed in 1963, and to adopt a policy of developing nuclear weapons. Keesing's Contemporary Archives, Vol. XX, 1974, p. 26585A.

99 The Times, 21 May 1974.

100 Albania is reported to have protested against the Indian test. Le Monde, 22 May 1974.



support to India would have upset China's well-established relations with Pakistan. It was in this latter country that the Indian explosion had raised, quite understandably, the most vehement protestations. In a statement made on 19 May 1974 by the Prime Minister of Pakistan, one could not overlook the following lines:

"... We shall not let ourselves be alone in facing this challenge. India has dynamited and shattered to pieces the non-Proliferation Treaty. This is bound to embolden Israel and South Africa to further work of demolition. It is not only we, therefore, but the Asian-African community that has been exposed to a new menace.

...What we need is a joint undertaking in the nature of an obligation by all the permanent members of the Security Council to act collectively or individually on behalf of the threatened State. ...a nuclear umbrella...is the irreducible minimum of protection that is required to give States like Pakistan a real assurance of security against nuclear threat or blackmail."<sup>101</sup>

Although this statement and other succeeding official statements had not threatened that Pakistan would follow the Indian example,<sup>102</sup> the latter course had not been excluded in spite of the fact that Pakistani nuclear capabilities were insufficient to support an indigenous nuclear-explosive programme. The Indian explosion also dimmed, if not eliminated altogether, the chance of Pakistan's adherence to the NPT, a treaty that Pakistan had supported but declined to sign in view of India's objections to it.

In 1979, after five years of the Indian explosion, Pakistan has been found developing secretly a centrifuge uranium enrichment plant at the town of Kahuta, southwest of Rawalpindi and not far from Pakistan's 5 MW research re-

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101 Some excerpts from the statement are reproduced in CCD/422, 23 May 1974.

102 In a television interview, the President of Pakistan's Atomic Energy Commission, implied that his country might be tempted to proceed with the explosion of a nuclear device. Le Monde, 23 May 1974.

actor which was purchased from the United States under the Atoms for Peace Programme and which went critical in 1965.<sup>103</sup>

During the latter part of 1978, Pakistan had been found buying in Europe equipment including inverters, or high-speed motor drives, and "martensitic aging steel." The inverters were being bought on the pretext that they were needed for a textile mill in Pakistan, but they were rather of the kind employed by the British Atomic Energy Commission. The steel was of the kind that was fit mainly for jet plane engines or gas centrifuges. Moreover, intelligence agencies in Europe and the CIA discovered that a leading Pakistani nuclear scientist had spent some time at the Urenco gas centrifuge plant in Almelo, the Netherlands which allowed him ample opportunity to acquaint himself with the technology.

The centrifuge method was not Pakistan's first choice. In 1976, under the late Prime Minister Zulfikar Ali Bhutto, Pakistan signed an agreement with France to buy a spent fuel reprocessing plant. Pakistan had already a 137 MW heavy-water reactor bought from Canada in 1965. Pakistan had also announced in 1975 an ambitious plan for 10 more reactors with the capacity of 1990 MW by 1990. Under persistent pressure from the United States, France was persuaded in August 1979 to postpone delivering the reprocessing facility to Pakistan indefinitely.

However, the centrifuge method for producing enriched uranium as pointed out in Chapter 6 has several advantages for a developing country like Pakistan. Electricity cost would be only a fraction of that required in a gaseous diffusion plant; centrifuge cascades can work on a much smaller scale and so can be processively built up over a period of

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103 The following is mainly based on abundant press reports, and personal contacts; an article by Zalmay Khalilzad "Pakistan and the Bomb," Survival, Vol. XXI, No. 6, Nov./Dec. 1979, pp. 244-250; and UN Doc. A/AC.187/70, 6 Oct. 1977, pp. 14-22. The latter includes a synthesis of Pakistan's proposal for the creation of a nuclear-weapon-free zone in South Asia.

time; and consequently centrifuge designed to do the early stages of uranium enrichment can be later adapted for the higher enrichment stages.

The centrifuge plant is reported to be in its early stages. According to the prevailing view of US intelligence officials, it is not expected that Pakistan would have the capability of building and testing a device before mid 1981.

It is also being alleged that the financing of the centrifuge plant, costing upward of 30 million dollars, has been secured from Libya.

Pakistan's plans were revealed by the United States in April 1979 coupled with a cutoff of economic and military aid. The US action was taken after a series of unsuccessful discrete extensive diplomatic efforts to persuade Pakistan to place the centrifuge facility under international safeguards. The cutoff was based on the International Security Assistance Act of 1977 which, inter alia, prescribes the cutoff of aid to any country that receives nuclear enrichment equipment, materials or technology unless first such items are placed upon delivery under multilateral auspices and management when available, and second all such items and also all nuclear fuel and facilities in the recipient country are put under IAEA safeguards. Under the 1977 Act, however, the President of the United States may continue to furnish prohibited assistance if he determines and certifies in writing to the Congress that the termination would have a serious adverse effect on vital US interests and that he has received reliable assurances that the country in question will not acquire or develop nuclear weapons or assist other nations in doing so.

The Pakistani case has instigated the United States and its partners in the London Suppliers Club to re-examine the "Trigger List" of items to close any future loopholes that may allow the purchasing of sensitive items without international safeguards.

Moreover, it was alleged that the United States had the intention of using covert action to sabotage the Pakistani centrifuge plant, which was denied by the United States through diplomatic assurances given to the Pakistanis. However, according to unconfirmed reports, it appears that the Indians were incited by certain quarters in the United States to undertake themselves the sabotage mission, which not only was rejected by the Indians but also the information about the incident was passed over by the Indians to the Pakistanis.

Before the Pakistani plan was revealed in April 1979, India's Prime Minister, Morarji Desai reportedly wrote to Pakistan's President Mohamed Zia ul-Haq in mid-February of the same year expressing concern. In one of the rare Indian public pronouncements on the issue, Prime Minister Charan Singh who succeeded Mr. Desai warned on Independence Day in a speech in New Delhi on 15 August 1979 that if Pakistan sticks to its plan to assemble a bomb, India would perhaps have to reconsider the whole question of nuclear armament.

In many of the early Pakistani statements on this issue, it was emphatically denied that Pakistan was seeking atomic weapons. It was pointed out that the enrichment plant was needed to provide fuel for future light-water reactors. Libya's financing support was also denied. President Zia ul-Haq in his response to Prime Minister Singh and later in an interview with Newsweek magazine of 23 July 1979, pointed out that the Pakistani nuclear programme was directed to peaceful uses of nuclear energy and that he offered to prove this by allowing inspection of Pakistani facilities if Indian facilities were to be inspected as well. In fact, as a result of the Indian explosion, Pakistan has been pursuing with great vigour a proposal which it submitted to the UN General Assembly in 1974 for the establishment of a nuclear-weapon-free zone in South Asia. US-Pakistani talks were held in Washington in October 1979. Although useful they were inconclusive, each party ending up by sticking to its own basic position. Events in Afghanistan, however, have ironically

changed the situation and aid to Pakistan is being reconsidered, regardless of its nuclear ambitions, to face-up to the Soviet threat in the region.

In the rest of Asia and Australia the Indian explosion was generally regretted. The official reactions in Japan were particularly hostile. Moreover, both Houses of the Japanese Parliament subsequently adopted resolutions protesting against the Indian test.<sup>104</sup>

After China's ascendancy to nuclear-weapon status in 1964, Japan as the only victim of nuclear weapons which were dropped on Hiroshima and Nagasaki, has remained hostile to nuclear weapons for itself or even to their introduction into the country by a foreign Power. This policy has been reaffirmed by successive governments with support of the opposition parties and of public opinion as a whole.<sup>105</sup> The traumatic nuclear allergy was still salient in the public opinion. In a survey carried out in May 1970, 67.6 per cent of the respondents considered the possession of nuclear weapons undesirable or very undesirable.<sup>106</sup> However, in an earlier survey of samples of post-war youth, it was clearly shown that they were less inhibited than the standard adult population of Japan in perceiving Japan's future war capability and nuclear development.<sup>107</sup> In the long

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104 See Le Monde, 26-27 May 1974 and Keessing's Contemporary Archives, Vol. XX, 1974, p. 265853. See also the statements made by the representative of Japan at the 100 in CUD/PV. 637, 21 May 1974, p. 18 and CUD/PV. 642, 11 July 1974, pp. 5-9.

105 For an assessment of Japanese attitudes in the early Chinese post-detonation period, see Kei Wakaizumi, "The Problem for Japan" in Buchan (ed.), A World of Nuclear Powers?, pp. 76-87. Among the numerous recent case studies of Japanese attitudes on nuclear weapons and the NPT, see The Near-Nuclear Countries and the NPT, pp. 35-42; Quester, The Politics of Nuclear Proliferation, pp. 103-121; and R. Imai, "The Non-Proliferation Treaty: The Japanese Attitude Three Years After Signing" in Nuclear Proliferation Problems, pp. 245-255.

106 Kunio Muraoka, "Japanese Security and the United States," The International Institute for Strategic Studies (London), Adelphi Papers, No. 95, Feb. 1973, p. 39.

107 Yasumasa Tanaka, "Japanese Attitudes Toward Nuclear Arms," Public Opinion Quarterly, Vol. XXXIV, No. 1, Spring 1970.

run, a Japanese analyst concluded that it might not be entirely unthinkable that Japanese youth some day would hold that nuclear arms were indeed an undesirable but necessary evil for national survival, if nuclear proliferation continued to go on outside Japan.<sup>108</sup> Would the Indian explosion, if also followed by others, mark the beginning of such a transformation in Japanese attitudes? Would it affect Japan's adherence to the NPT? As observed by another Japanese analyst in 1973, "the NPT is a non-issue in Japan today and...no one in the political parties, civil service or industry can expect to make political or other gains by publicly promoting the cause of the NPT."<sup>109</sup> The Japanese case will certainly remain a unique case to follow in the near future.

Outside of Asia, the Indian "peaceful nuclear explosion" had certainly not failed to have its greatest impact on Brazil, one of the very few countries asserting their right to manufacture nuclear explosives for peaceful purposes. The Government's position was supported overwhelmingly by the general public, as was shown by a public opinion survey sponsored by the Government and carried out by an independent survey research firm, the Brazilian Institute of Public Opinion and Statistics. Brazil's leading newspapers had been more divided with some editorials vehemently criticising the Government's NPT policy and others warmly or cautiously applauding it. Hostility to Brazil's policy was also evident among members of the political élite.<sup>110</sup> Brazil seems to be heading for the acquisition of the necessary nuclear capabilities to sustain an indigenous nuclear-explosive programme. Its co-operation agreement with the FRG on 27 June 1975 would

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108 Ibid., p. 42.

109 R. Imai, "The Non-Proliferation Treaty: The Japanese Attitude Three Years After Signing," pp. 245-246 and "Non-Proliferation: a Japanese Point of View," Survival, Vol. XXI, No. 2, Mar./Apr. 1979, pp. 50-56.

110 H. Jon Rosenbaum and Glenn M. Cooper, "Brazil and the Nuclear Non-Proliferation Treaty," International Affairs (London), Vol. 46, No. 1, Jan. 1970, pp. 82-83.

most probably pave the way towards such an eventuality. If it decides to follow the Indian example, Argentina, which is more advanced than Brazil in nuclear technology and which is also helped by the West Germans, may follow suit. This may lead to the collapse of the Treaty of Tlatelolco which was painstakingly negotiated and concluded. Such a collapse would be a serious setback for the efforts exerted elsewhere for the establishment of nuclear-weapon-free zones inspired by the Latin American model.<sup>111</sup>

In Africa, denuclearisation has been delayed because of the uncertainties about South African attitudes towards nuclear weapons as well as the growing worries especially among the African Arab countries about the Israeli nuclear programme. A close co-operation between the technically advanced Israel and the uranium rich South Africa is not excluded by the African and Arab countries.

Will the Indian explosion incite South Africa to follow suit? The country, in addition to its vast uranium reserves estimated to be about 300,000 tons in the economically exploitable price range, has already the capability of enriching uranium. In July 1970 the Prime Minister of South Africa reported that South African Scientists had invented a new process for uranium enrichment, which appears to be a mixture of existing enrichment techniques, i.e., gaseous diffusion and gas centrifuge. Although it voted for the UN General Assembly resolution commending the NPT, it has not yet adhered to the Treaty. The Prime Minister let it be known that South

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111 From the abundant recent literature on the nuclear ambitions of Argentina and Brazil, see more particularly, Paul Buchanan, "Argentina: At the Threshold in the Southern Cone?", Arms Control Today, Vol. 9, No. 9, Oct. 1979, pp. 4-7; Normal Gall, "Atoms for Brazil, Dangers for All," Foreign Policy, No. 23, Summer 1976, pp. 155-201; William W. Lawrance, "Nuclear Futures for Sale: To Brazil from West Germany, 1975," International Security, Vol. 1, No. 2, Fall 1976, pp. 147-166; and Edward Wonder, "Nuclear Commerce and Nuclear Proliferation: Germany and Brazil, 1975," Orbis, Vol. 21, No. 2, Summer 1977, pp. 277-306.

Africa would consider participation as soon as the safeguards system to which South Africa would be subject, was known. The country is surrounded by hostile countries in the north, and is more than ever isolated in the international community because of its policy of apartheid and its unrelenting position with regard to Namibia (South-West Africa).<sup>112</sup>

Will South Africa be encouraged to "go nuclear" by the timid attitudes of the African States with regard to the Indian explosion? For example, Nigeria (which was the only African country Member of the CCD to have expressed itself on the issue) while regretting the Indian test, thought that the test was expected because of the lack of benefits under articles IV, V and VI of the NPT. Its delegation to the CCD was glad to note India's intentions to use its newly-acquired nuclear capability solely and exclusively for peaceful purposes.<sup>113</sup>

The attitude of the African countries was certainly not timid with regard to South Africa. In the OAU meetings, South Africa's nuclear ambitions were condemned on the one hand and the need for the establishment of an African nuclear-weapon-free zone was emphasised on the other.

Moreover, on the initiative of the African States a UN Security Council Committee on South Africa was established by the Council on 9 December 1977, consisting of all Members of the Council. In its turn, the Committee decided on 31 October 1979 to establish an open-ended Working Group of the Committee to formulate recommendations to the Security Council with a view to averting the danger of the acquisition of nuclear weapons by South Africa.

In its first report to the Council on this issue in December 1979, the Committee found while there was general

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<sup>112</sup> For more details and substantial analyses of South African capabilities and attitudes, see The Near-Nuclear Countries and the NPT, pp. 32-35; Quester, The Politics of Nuclear Proliferation, pp. 198-204. and Cassuto, "Can Uranium enrichment Enrich South Africa", loc. cit.

<sup>113</sup> CCD/PV.638, 23 May 1974, p.19 and CCD/429, 11 July 1974.



agreement among Members of the Committee on the objective, different points of view were expressed on the type of action to be recommended to the Security Council. Ten Members were of the view that the Security Council should immediately take action to prohibit all forms of nuclear collaboration with South Africa. The remaining Members, including the United States, the United Kingdom and France were unable to accept this proposal. They contended that it would not promote the adherence of South Africa to the NPT. They supported, instead, in varying degrees certain measures foremost among them the imposition of full-scope international safeguards.

At the General Conference of the IAEA, which was also held in December 1979 at New Delhi, the United States and its allies had tried in vain to envoke the same argument of the importance of the adherence to the NPT by South Africa to dissuade the non-aligned and Eastern European countries from banning South Africa from participating in the General Conference, as a result of its apartheid policies.

By the end of 1979, growing conviction assumed that South Africa was the country responsible for the presumed test explosion that took place on 22 September 1979 in the area of the Indian Ocean and South Atlantic, and which was detected by a US Vela satellite. In spite of South African denials and US assertions that the evidence is inconclusive, as to the source of the event, the African countries have managed to secure a UN General Assembly resolution vigorously condemning South Africa for the reported explosion of the nuclear device. The Assembly, inter alia, further requested the US Secretary General to prepare a comprehensive report on South Africa's plan and capability in the nuclear field.<sup>114</sup>

One fact remains, however, to be ascertained. If a nuclear device were really exploded in this part of the world,

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<sup>114</sup> For more details on UN actions, see UN Docs. S/13708, 26 Dec. 1979; S/13721, 31 Dec. 1979; and A/RES/34/76, 2 Jan. 1980. On the nuclear-weapon-free zone in Africa, see UN Doc. A/AC. 187/70, 6 Oct. 1977, pp. 2-13.

would it be possible that South Africa, known to have close nuclear ties with Israel, has collaborated with the latter in this regard? Or, is it farfetched to assume that Israel known to have more advanced nuclear capabilities than South Africa but deprived of a suitable place to test on its territory, has chosen to do so alone in the Indian Ocean in order to conceal and avoid the detection of the explosion? This issue remains to be settled. It will be reverted to in the remaining part of this chapter on Israel's nuclear activities.

Going back to the Indian explosion of 1974, it was in Western Europe that some net immediate reactions against the Indian test could be recorded. For example, the Swedish Prime Minister observed, inter alia, that the Indian explosion broke the development of détente and normal neighbourly relations on the Indian sub-continent. The Netherlands' Government believed that the Indian nuclear test undoubtedly represented a serious setback to non-proliferation efforts and efforts to ban tests everywhere and by everyone. For the Netherlands' Government a psychological dam had been breached.<sup>115</sup>

Strikingly enough, the immediate official reactions of the two super-Powers were very mild, even vague. At the CCD, the US delegation merely reaffirmed the opposition of the US to nuclear proliferation, because of its adverse impact on world stability.<sup>116</sup> The delegation of the Soviet Union stressed the importance of increased participation in the Partial Test-Ban Treaty and the NPT. It suggested that practical steps should be devised to encourage accession, and that the Review Conference should be used to review the operation of the NPT.<sup>117</sup>

As to the positions of the two other western nuclear-weapon States, the United Kingdom could not hide its deep con-

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115 The Swedish Prime Minister's statement is quoted in CCD/PV.637, 21 May 1974, p. 19. See also CCD/PV.638, 23 May 1974, pp. 11-12 (the Netherlands).

116 CCD/PV.637, 21 May 1974, p. 19.

117 CCD/PV.638, 23 May 1974, pp. 22-23.

cern over the Indian nuclear test which had increased the dangers that others might decide to follow' suit.<sup>118</sup> In France, the Commissariat à l'énergie atomique (CEA) congratulated the Indian scientists for their technological breakthrough. As explained by the Administrator of the Commissariat, "il est fréquent de le faire entre organismes nucléaires amis en pareille circonstance ... . Ne pas les féliciter serait revenu à mettre en doute l'objectif pacifique annoncé par le gouvernement indien, ce qui ne nous a pas paru souhaitable."<sup>119</sup>

India has counter-reacted in asserting the peaceful objectives of its nuclear-explosive programme. India is even determined at some stage to manufacture thermonuclear devices which would be needed for large-scale peaceful-nuclear-explosions projects. For some time Canada's action caused a substantial setback to India's nuclear power plants. Dr. Homi Sethna, the Chairman of the Indian Atomic Energy Commission said that his programme would be further delayed "by a year if we are lucky, more likely two years."<sup>120</sup> The setback proved to be even greater. The second unit of the Rajasthan reactor which was under construction in 1974 is still expected to become operational in 1980.

India, as pointed out earlier, is also facing a problem with the United States, as a result of the latter's Nuclear Non-Proliferation Act of 1978 requiring the application of full-scope safeguards. If India was to benefit from a US waiver exempting it from such a requirement and obtain the long-awaited enriched uranium needed for the Tarapur reactor, how can the United States get away with its harsh policies towards Pakistan, or with its enthusiastic advocacy of non-proliferation to others? A waiver for India would in fact be tantamount to a final seal legitimizing the nuclear status of India. There is no doubt that India's prestige in the

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118 UCD/PV.641, 9 July 1974, pp. 8-10.

119 Le Monde, 28 May 1974.

120 The Guardian, 9 Sept. 1974.

world today has gained as a result of its nuclear ascendancy. After all, is it not the gathering of all States Members of the IAEA in their General Conference in New Delhi in 1979, five years after the explosion, a world acquiescence in India's new status?

A remaining question is whether India will be ready to extend its technological knowledge in the field of peaceful nuclear explosions to other countries, such as Brazil. It may be difficult for India to deny this knowledge to interested countries, especially when the Indian breakthrough is "peacefully intended". However, it would not be surprising if India adopts the restraints so far observed by the five nuclear-weapon States with regard to the proliferation of knowledge about nuclear-explosive technology.

To conclude, is the cause of non-proliferation lost because of the Indian explosion and its potential catalytic effects on future proliferation? Shall the world resign in despair to the fate of a future world of many nuclear-weapon (or explosive) Powers? If India's nuclear-explosive programme is to remain "peaceful" and if a domino effect is to be averted, two basic measures, one regional and the other international, appear to us to be the minimum prerequisites.

On the regional level, a nuclear-weapon-free zone could be established in South Asia whereby peaceful nuclear explosions may be carried out by India only under international observation, for which certain rules have been devised by the IAEA.<sup>121</sup> On the international level a comprehensive underground test-ban treaty should be concluded without further delay whereby all peaceful nuclear explosions will be permitted to be carried out under international observation. India, which has always strongly advocated a comprehensive test ban, will certainly find it quite embarrassing not to submit to international observation once it is accepted by the two super-Powers. In fact, if a comprehensive test ban would have been reached a long time ago, India might have never been so close to the path of a nuclear-

<sup>121</sup> See Chapter 7.

weapon capability. Difficulties in reaching agreement on these two measures are not underestimated, but they should be overcome in a very short delay lest further proliferation takes place in an equally sensitive region of the world, i.e., the Middle East.

## 2. Israel

The Indian explosion of 18 May 1974 and world reactions to it have certainly not failed to receive the greatest attention by the Israeli decision makers. The lessons which can be drawn from the Indian test's "fallout" may be of some guidance for Israel in designing its future course on nuclear matters. Although there are great differences between the defence and foreign policy objectives of India and Israel, there are two remarkable similarities between them on the technical and military levels. Technologically, each has a nuclear research reactor free from foreign or international control and capable of producing enough plutonium for at least one nuclear-explosive device annually. Militarily, each faces a foe which has shown or asserted a conventional superiority or at least an upsetting equality. The October 1973 war in the Middle East has seriously shaken the previously held dogma of Israel's superiority.

In contrast with India, no public debate is taking place in Israel on the relevance of its nuclear capabilities to its security. Israeli nuclear activities are generally shrouded in secrecy, especially those relating to the Dimona reactor. The latter's site is out-of-bounds even for Knesset members.<sup>122</sup> The Israeli programme was set up and is being run and serviced by the military for all intents and purposes,<sup>123</sup> whereas in India the nuclear programme is under civilian management. These factors in addition to the rarity and vagueness of official statements on the Israeli programme raise considerable doubts and speculations about its peaceful orientation.

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<sup>122</sup> Jabber, Israel and Nuclear Weapons, p. 33.

<sup>123</sup> Fuad Jabber, Israel's Nuclear Option and US Arms Control Policies (Santa Monica, California: Southern California Arms Control and Foreign Policy Seminar, 1972), p. 13.

Israel's positions with regard to the NPT are not helpful either in reading the Israeli mind on the role of nuclear energy in formulating the present and future strategies of the country. Although Israel voted in favour of the UN General Assembly resolution commending the NPT, its interventions in the debates of the First Committee of the Assembly and later in the Conference of Non-Nuclear-Weapon States were inconclusive as to its future attitudes and readiness to submit its nuclear programme to international safeguards. While raising few objections to the NPT, not uncommon even to those who had adhered to it, Israel had persistently tried to shift the attention from nuclear weapons to the arms race of conventional weapons in the Middle East.<sup>124</sup> Ever since its positive vote in favour of the General Assembly resolution, Israel had neither signed the Treaty before its entry into force nor given the slightest indication that it was ready to accede to it.

Israel's adherence to the NPT had not been made conditional on the fulfilment of certain conditions as the case had been with the Euratom countries, although it was reported to have been inclined to sign the NPT in return for a United States guarantee.<sup>125</sup> Three of its immediate Arab neighbours: Jordan, Lebanon and Syria, had even ratified the NPT. The Fourth, Egypt, signed the Treaty and had on several occasions indicated its willingness to ratify if Israel acceded to it. Israel's main preoccupation seems to be that the psychological-deterrence value of the country's potential nuclear capacity would be compromised if it were to adhere to the Treaty.<sup>126</sup> But before dealing with this so-called "deterrence through

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<sup>124</sup> See, for example, A/C.1/PV.1576, 29 May 1968, para. 81 and A/CONF.35/SR.13, 12 Sept. 1968, p. 175.

<sup>125</sup> See Chapter 8.

<sup>126</sup> See Jabber, Israel's Nuclear Option and US Arms Control Policies, p. 18.

uncertainty", Israel's nuclear capabilities ought to be briefly discussed.<sup>127</sup>

(a) Nuclear Capabilities

The main known ingredients of the Israeli nuclear programme as far as its nuclear-weapon potential is concerned are uranium extraction, research reactors and "hot laboratories". Israel has the scientific industrial infrastructure to sustain and develop such a programme further beyond its present status.

As previously mentioned, Israel has managed to extract uranium from phosphates, as a by-product of its fertiliser industry. In 1963, it was reported that the process of production from phosphates was estimated to cost as much as ten times more per ton of uranium as the world price, which was \$10 - \$12 a pound in the late 1950s. However, in February 1974, a member of the Israeli Atomic Energy Commission indicated that Israel would manage to produce uranium oxide at the cost of \$15 a pound, the current world price then. An alternative method of uranium production was examined by the Israelis to reduce by half the cost. It is estimated that 25,000 tons of uranium could be extracted from the 220 million tons of reserves of Israeli phosphates.<sup>128</sup> The main advantage of uranium local production, which is expected to reach the figure of 50 tons annually, is that it ensures long-term self-sufficiency for future power reactors using natural uranium and producing twice as much plutonium in comparison with the American-type power reactors burning slightly enriched uranium. The enrichment techniques are not known to have been developed by the Israelis.

In view of the difficulty and cost of producing uranium from phosphates, Israel had to look for supplementary sup-

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127 For an extensive analysis of Israel's nuclear programme and its military potential, see Jabber, Israel and Nuclear Weapons, Parts 1 and 2. The following is mainly based on Jabber's book unless otherwise indicated.

128 For an interesting account of Israel's present endeavours in this domain, see Le Monde, 10-11 Feb. 1974.

plies elsewhere. As pointed out in Chapter 10, Israel was believed to be responsible for the loss of highly enriched uranium in a Pennsylvania Plant in 1965 as well as for the disappearance from the high seas of 270 tons of uranium ore without any trace in 1968.

Israel has so far no power reactors, but a decision has been taken in May 1973 to build a 600 MW(e)-power reactor to meet 15% of Israel's electricity needs in 1981-1982.<sup>129</sup>

In the light of the US Nuclear Non-Proliferation Act of 1978, requiring full-scope safeguards, Israel has indicated no interest in pursuing the matter further.

Apart from the Dimona 24 MW(th) research reactor in the Northern Negev, Israel has a less-controversial research reactor of a 5 MW(th) capacity at Nahal Soreq, south of Tel Aviv, near the Weizmann Nuclear Research Centre in Rehovoth. The two reactors are named IRR-2 and IRR-1 respectively.<sup>130</sup>

The Nahal Soreq reactor was built in co-operation with the Americans. The work was completed in May 1960, and the reactor became critical on 16 June of that year. The reactor burns highly enriched uranium (90%). The quantity of U-235 annually provided for the reactor was reported to be ten kilogrammes. The reactor was visited twice a year by American inspectors until 1965. Since then the safeguards functions were transferred to the IAEA. However, no inspection of the reactor by IAEA inspectors is reportedly taking place. According to IAEA officials this is standard procedure where small facilities of a rating not higher than 3 megawatts - which is not the Israeli case - are involved. It ought to be noted, however, that on the one hand a degree of control is indirectly exercised by the United States, since the spent fuel is shipped back to the United States for reprocessing. On the other hand, there is a near absence of plutonium, since the

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<sup>129</sup> Ibid.

<sup>130</sup> For some technical hints of the two reactors, see Power and Research Reactors in Member States (1972 Edition), op. cit., p. 43.



reactor's fuel is highly enriched in the isotope 235. The only possibility open to Israel is to use the highly enriched uranium as the explosive core for a nuclear warhead of the Hiroshima type, but it is considered technically unfeasible as well as an unlikely step for a country substantially dependent on the United States.

It is the unsafeguarded Dimona reactor which is the source of concern. The reactor, which became critical in December 1963, had merely been unofficially "visited" by American scientists, an arrangement instituted at the insistence of the Kennedy Administration so as to check on the nature of the work being done there. However, it should be noted that the visitors had charged that no adequate inspection was possible because of the "hurried and limited nature" of the visits allowed. Moreover, visits had always taken place on dates set by the Israeli Government. In an exchange which took place in the Knesset on 5 July 1966, Levi Eshkol, the then Prime Minister and Minister of Defence, explained that "(t)here has been neither control nor supervision - and I advise you to distinguish between a visit, control and supervision - on the part of any country over the Dimona atomic research reactor ..."<sup>131</sup>

Before leaving Washington in November 1976, Israel denied the request of some members of the US Senate delegation to the Middle East to conduct a study on US security and foreign policy interests with particular emphasis on nuclear proliferation to visit the Dimona reactor. A second request while the delegation was visiting Israel was also denied. The Israeli government argued that Dimona was a national security facility, that Israeli policy was to restrict access to Dimona, that no American had been admitted since 1969, and that the facility had neither been built nor assisted by the United States.<sup>132</sup>

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<sup>131</sup> As quoted in Jabber, Israel and Nuclear Weapons, p. 39.

<sup>132</sup> US Congress, Senate, Senate Delegation Report on American Foreign Policy and Non-proliferation Interests in the Middle East, Senate Document No. 95-47, 95th Congress,

In plutonium-breeding reactors such as Dimona, the rate of plutonium production is about one gramme per 1,000 kilowatts-days. The Dimona reactor, with a rating of 24,000 kilowatts thermal, would, if run at full power for 300 days per year therefore produce 7.2 kilogrammes of plutonium ( $24 \times 300 / 1000$ ). Since the critical mass for a Nagasaki-type atomic bomb is 5.79 kilogrammes of pure plutonium, Israel can therefore produce enough plutonium at Dimona for approximately  $1 \frac{1}{3}$  bombs a year. And since Dimona became critical in December 1963, this means that by the end of 1979, Israel had the capacity of accumulating enough plutonium for assembling about 21 bombs. However, the plutonium fabricated in the reactor will have to be separated from the other fuel elements in a chemical separation facility before it can be used in nuclear weapons.

As far as the Israeli programme is concerned, there is no evidence to indicate that a typical chemical separation plant with a long, tall, windowless shape, as well as isolated from populated areas and other characteristics, has been built. The construction of such a typical facility can hardly be dissimulated, and in the absence of a fast breeder reactor programme or a large nuclear establishment can be interpreted only in terms of a military capability, particularly in the tense political context of the Middle East. It is therefore possible that Israel may have built a very small facility in absolute secrecy so as not to alarm the Arabs into actively seeking a nuclear capability of their own.<sup>133</sup> According to Dr. Glenn Seaborg, the previous Chairman of the US Atomic Energy Commission, it is not impossible to construct a facility in secret, particularly if it is designed to handle small quantities of spent fuel.<sup>134</sup> It is even suggested that

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1st Session (Washington, D.C.: US GPO, June 1977), p. 2, hereinafter cited as Senate Delegation Report on Non-proliferation in the Middle East.

133 Jabber, Israel and Nuclear Weapons, pp. 77-78.

134 Hearings on Nonproliferation of Nuclear Weapons, pp. 61-62.

a bomb may have been separated in Israel's "hot laboratories".<sup>135</sup>

The "hot laboratories" were built with British assistance near Nahal Soreq for the processing of radioactive matter produced by the reactor there. These laboratories are equipped - through American aid - with special remote control and automatic instruments necessary to handle highly toxic material. Similar facilities have been constructed as part of the Dimona complex to deal with the irradiated elements produced by the reactor there.

If Israel has managed to separate the plutonium in "hot laboratories", it would not be difficult to proceed with designing and constructing the weapon, for which most of the technical information required is in the public domain. Testing the weapon is no longer considered as absolutely necessary before deployment, particularly if it has been designed and assembled along conventional lines, without any essential innovations. The Hiroshima bomb was not pre-tested, although it was an uranium bomb and not a plutonium bomb, which Israel can produce or may have produced. Apparently, computer simulations can test an explosive device, and there are rumours that Israel has indeed done such a simulation.<sup>136</sup> Moreover, in order to avoid the considerable risk of detection of an underground test explosion, for example, in the narrow territory of the country, Israel could well carry out such a test in a remote area of the globe; in a depleted gold mine in South Africa, for example. This is just a hypothesis, but it is not far-fetched since the United Kingdom Government managed for a few weeks in May-June 1974 to keep undisclosed an underground nuclear-weapon test it carried out in the American-proving grounds in Nevada.<sup>137</sup>

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<sup>135</sup> Leonard Beaton, "Why Israel Does not Need the Bomb: A Report on the Real Nuclear Standing of Egypt, India and Israel", The New Middle East, No. 7, Apr. 1969, pp. 9-10.

<sup>136</sup> Quester, The Politics of Nuclear Proliferation, p. 101.

<sup>137</sup> See Keesing's Contemporary Archives, Vol. XX, 1974, p. 26624A.

Moreover, the aforementioned event detected over the area of the Indian Ocean and the South Atlantic by a US Vela satellite on 22 September 1979 could very well be an Israeli and not a South African test. However, because of the proximity of the presumed testing area to South Africa a collaboration between the two should also not be excluded.

Departing from the assumption that testing is no longer considered necessary or that testing can be done by computer simulations, the issue of whether Israel would wish to announce the carrying out of a test explosion or not depends on its strategic and diplomatic objectives and the geopolitical context in which it finds itself. But before embarking on an assessment of these considerations, which would bring us back to the so-called "deterrence through uncertainty", the delivery system as a major component of a nuclear-weapon capability ought to be briefly examined.

In the case of Israel, the acquisition of a sophisticated nuclear delivery system is not a must. Israel's former Chief of Military Intelligence, Brigadier-General Yehoshafat Harkabi, made the following point:

"Means of delivery are likely to constitute a lesser problem in a confrontation between small states, where relatively simple delivery vehicles may suffice. ... The problem of delivery ... depends upon the distance between the country and its potential adversary and upon the adversary's means of defence."<sup>138</sup>

Although Israel has a strong and modern air force capable of carrying out nuclear strike missions,<sup>139</sup> it has developed

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<sup>138</sup> Y. Harkabi, Nuclear War and Nuclear Peace (Jerusalem: Israel Program for Scientific Translations, 1966), p. 161.

<sup>139</sup> It was reported that Israeli officials negotiating the purchases of the Phantom F-4 asked their Pentagon counterparts whether the airplanes might be equipped with racks suitable for carrying nuclear weapons. This request was refused. Quester, The Politics of Nuclear Proliferation, p. 100. Quester considered that the request was probably intended to test American reactions to the nuclear question rather than to acquire the racks, which they could engineer. For detailed informations on the elements of the Israeli air force, see The Military Balance, 1979-1980 (London: IISS, 1979), pp. 40-41.

a missile capability at considerable expense not commensurate to a conventional programme, and therefore hard to justify except in the context of a possible nuclear-weapons programme. Local tests with home-manufactured solid-fuel rockets were carried out as early as 1961. Later on, the French manufacturer, Marcel Dassault, was commissioned to develop a surface-to-surface mobile missile system at an expense of reportedly over \$100 million dollars. The product, code-named "MD-660," is an MRBM with a range of 280 to 300 miles and capable of carrying a 1200-lb warhead. Delivery might have been delayed by the French arms embargo imposed in 1967, although some reports indicated that two missiles were delivered before the ban was imposed and that development had been continued in Israel, where the missile had been renamed the "Jericho."<sup>140</sup> The success of the Egyptian and Syrian air-defence systems during the October 1973 Middle East war induced the Israelis to develop and modernize further their missile-systems, which would permit them an assured penetration of Arab defences. Shortly after, they acquired the US Lance missile with a range of 2.6-70 nautical miles.

#### (b) Strategic and Diplomatic Objectives

Turning to Israel's strategic and diplomatic objectives in developing a sophisticated nuclear capability susceptible to serve military ends, a distinction has to be made between maintaining an advanced nuclear-weapon option or secretly developing the weapons, and announcing the development of a nuclear-weapon capability through the so-far traditional explosion of a nuclear-explosive device in a testing ground. As previously indicated either course depends on the geopolitical context in which Israel finds itself.

If Israel maintains the option (or if it has secretly manufactured a nuclear weapon), a distinction has to be made in turn between Israel's objectives vis-à-vis the super-Powers and vis-à-vis the Arabs.

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<sup>140</sup> Jabber, Israel's Nuclear Option and the US Arms Control Policies, p. 6.

Israel's objectives vis-à-vis the super-Powers would seem to be the following:<sup>141</sup>

- The demand for limitations on super-Power supplies of conventional arms to the Arab countries. This demand, coupled with Israel's refusal of the imposition of controls over its nuclear programme, led some observers to conclude that its regional nuclear superiority was being used as a bargaining counter. It is also considered that in any future arms control negotiations, the bargaining power would cease to be so if Israel were to become a nuclear-weapon Power.<sup>142</sup> However, the demand for conventional arms' limitations did not bear fruits. The escalation in conventional armaments had taken place on both the Israeli and Arab sides before and after the two Middle East wars of June 1967 and October 1973.

- The search for guarantees or military alliances. Apparently, Prime Ministers David Ben Gurion and Levi Eshkol both sought some kind of military alliance with western Powers or with NATO. At the same time there is a strong tradition in Israel that the country ought never to depend on outside military guarantees. The October 1973 war in the Middle East reopened the debate in Israel on the efficacy of outside guarantees.<sup>143</sup> However, it ought to be noted that in the absence of any formal arrangement, the United States has always supported Israel's existence,<sup>144</sup> and furnished it with all its needs in military material. After the October war, security guarantees appeared to be one of the ideas that

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141 See Yair Evron, "Israel and the Atom: The Uses and Misuses of Ambiguity, 1957-1967", Orbis, Vol. XVII, No. 4, Winter 1974, pp. 1334-1340, hereinafter cited as "Israel and the Atom".

142 See ibid., p. 1336.

143 ibid., pp. 1336-1337.

144 See, for example, Henry Kissinger's response, when interviewed at Peking on 12 November 1973, on whether the American Administration would support the establishment of a bilateral treaty between the US and Israel. DOSB Vol. LXIV, No. 1798, 10 Dec. 1973, p. 715.

were under consideration in the context of a global peaceful settlement of the Middle East conflict.<sup>145</sup> Israel's nuclear-weapon option may become of no avail for obtaining a specific guarantee, if such a political settlement were to include, inter alia, the adherence of Israel to the NPT, which would actually bring all Israeli nuclear activities under international safeguards. Paradoxically, a specific guarantee to Israel might be obtained if it were to give up its nuclear-weapon option and submit to IAEA safeguards. During the Camp David Talks in September 1977 Israel refused to discuss the issue of adherence to the NPT.

- Securing a supply of conventional weapons. Apparently, this was perhaps the most feasible arena for the use of the Israeli nuclear-weapon option. It was suggested that in 1964, and again in 1966, Prime Minister Levi Eshkol brought the option into play by suggesting to the Americans that the activities in Dimona would not be extended beyond the level attained at that time, as a quid pro quo for supplies of American conventional weapons. Moreover, it was suggested that the super-Powers' manifest readiness to supply conventional arms to the parties to the Middle East conflict was motivated presumably by disparate considerations barely including the nuclear issue.<sup>146</sup>

As to the uses of the Israeli nuclear-weapon option vis-à-vis the Arabs, they tend to centre around the so-called "deterrence through uncertainty". The possibility that the option could be used against the Arab States in order to achieve political and strategic advantages had been elaborated upon to some extent in Israel. The attempt to create intentional ambiguity about the stage of nuclear development the country had reached was hoped to produce a deterrent effect. A leading Israeli analyst considered that the "psychological nuclear deterrence" would probably have the following purposes: deterring the Arabs from attacking Israel; deter-

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<sup>145</sup> See Ibid.

<sup>146</sup> Evron, "Israel and the Atom", pp. 1337-1338.

ring the Arabs from competing with her in nuclear science and technology or what has been called "deterrence by frustration"; and deterring the Arabs from contemplating the creation of nuclear weapons. On the other hand, the analyst considered that a statement made by Prime Minister Eshkol that "Israel has no atomic arms and will not be the first to introduce them into the (Middle East) region"<sup>147</sup> removed some of the ambiguity.<sup>148</sup>

Before assessing this policy of "deterrence through uncertainty", the above Eshkol's statement, the phraseology of which has been repeated in other Israeli statements, needs to be scrutinised. Despite the apparently categorical tone of such a statement it did not foreclose options. First of all, while denying the existence of locally produced weaponry, there is silence on the question of production capacity. Secondly, the denial that weapons have been built leaves open the possibility that nuclear explosives for "peaceful" purposes are being developed. As to the issue of not being the first to "introduce" nuclear weapons into the region, nuclear weapons are already present in the Middle East in the fleets of the super-Powers. Were Egypt to launch a nuclear power programme, would Israel consider that nuclear weapons have been "introduced" into the region? Israel's nuclear activities have been justified on more than one occasion as being in anticipation of and as a defence against possible nuclear acquisition by the Arab side.<sup>149</sup> The Israeli immediate reactions to the negotiation of an "Agreement for Cooperation" in the field of nuclear energy between Egypt and the United States, a negotiation agreed upon during President Richard Nixon's

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147 The statement which was made in a major policy speech in the Knesset on 18 May 1966 is quoted in Jabber, Israel's Nuclear Option and US Arms Control Policies, p. 15.

148 Evron, "Israel and the Atom", pp. 1340-1341. Evron was sceptical about the constructiveness and productivity of Israeli ambiguities.

149 See Jabber, Israel's Nuclear Option and US Arms Control Policies, pp. 15-17.



visit to Egypt in June 1974,<sup>150</sup> revealed, in fact, a considerable concern.<sup>151</sup>

The policy of "deterrence through uncertainty" is counter-productive and may even lead the Arabs and, more particularly, Egypt to seek a nuclear-weapon option (or nuclear weapons). To be more specific, in the first place this policy has not deterred the Arabs' determination from recuperating their lost territories in the June 1967 war, a determination that led to the October 1973 war.

Secondly, the Arabs have been impressed by the Israeli scientific and technological achievements in the field of nuclear energy, but not to the point of frustration. They may have lagged behind in matching the Israeli effort because of the lack of energy needs. However, it should be conceded that Egypt, for example, which has only one Soviet-built 2 MW(th)-research reactor at Inshas near Cairo,<sup>152</sup> had failed for many years to develop its nuclear programme because of the enormous financial requirements and the lack of managerial capabilities for directing such an effort.<sup>153</sup> As previously mentioned, Egypt had also failed to secure Chinese assistance in developing its nuclear programme. Nonetheless, Egypt, as well as other Arab countries, are showing great interest in building nuclear power reactors. Egypt and the United States initialed a nuclear co-operation agreement on 6 August 1976, but as a result of the US Nuclear Non-Proliferation Act of

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150 See the text of the "Principles of Relations and Co-operation Between Egypt and the United States" signed in Cairo on 14 June 1974 in DOSB, Vol. LXXI, No. 1829, 15 July 1974, pp. 92-93. The United States Government offered to both Egypt and Israel the construction of a 600 MW(e)-power reactor.

151 See "Dayan Warns Against US-Egypt A-Accord" and "Allon: Israel Surprised by A-Pact With Egypt" in The Jerusalem Post (Weekly Overseas Edition), 18 June 1968.

152 Apart from Egypt, Iraq has also a 2 MW(th)-research reactor. See Power and Research Reactors in Member States (1972 Edition), op. cit., pp. 42 and 50.

153 See Mohamed Hassanein Heikal, "Al-Konbola (The Bomb)," Al-Ahram, 23 Nov. 1973.

1978 the agreement was kept dormant. In October 1979 negotiations were resumed between the parties with a view of concluding a new agreement.<sup>154</sup>

The Arab oil-producing countries may follow the example of pre-revolutionary Iran in using their oil revenues in erecting a solid base for their future energy needs as well as for large agro-industrial projects most needed for their arid areas.<sup>155</sup> France, for example, is constructing two nuclear research reactors using highly-enriched uranium for Iraq. The French factory was heavily damaged in April 1979 in a sabotage action believed to be the doing of Israeli agents.<sup>156</sup>

Iraq and Israel are, in fact, very much intrigued by each other's nuclear activities. At the Ad hoc Committee of the Tenth Special Session of the UN General Assembly devoted to disarmament, Iraq submitted a paper entitled "a Study on Zionist Conventional and Nuclear Armament." Moreover, at the 34th session of the UN General Assembly in 1979, Iraq requested the inclusion of a new item in the agenda of the session entitled "Israeli nuclear armament." Supported by a great number of non-aligned countries, Iraq succeeded in securing a resolution adopted by the Assembly with a fairly large majority which, inter alia, strongly condemned any attempt by Israel to manufacture, acquire, store or test nuclear weapons or introduce them into the Middle East. It also requested the UN Secretary General, with the assistance

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154 See Nucleonics Week, 8 Nov. 1979, p. 18. On Egypt's nuclear-power programme, see the papers presented by the Egyptian Atomic Energy Establishment in the Salzburg Conference in 1977 in Nuclear Power and Its Fuel Cycle, Vol. 2, pp. 301-314 and Vol. 6, pp. 141-158 and 173-192.

155 Iran had launched an ambitious nuclear-power programme. For example, on 27 June 1974 it signed with France a co-operation agreement in the field of nuclear energy whereby France would furnish Iran with power reactors with a net output of 5000 MW(e). Le Monde, 29 June 1974.

156 The Washington Post, 7 Apr. 1979.

of qualified experts, to prepare a study on Israeli nuclear armament and to report to the General Assembly at its 36th session in 1981.<sup>157</sup>

Thirdly, the Arabs will hardly be deterred from acquiring nuclear-weapons capabilities by a policy of "deterrence through uncertainty."<sup>158</sup> In the aftermath of the October 1973 Middle East war, it was reported that the Arab summit conference held in Algiers from 26 to 28 November 1973 discussed the possibility of Arab States acquiring nuclear weapons, and decided to revive and implement inter-Arab co-operation in the field of nuclear energy.<sup>159</sup> On the eve of the Conference, Mohamed Hassanein Heikal, the editor-in-chief of the Egyptian newspaper Al-Ahram, said in his weekly column that he was convinced that Israel had a nuclear weapon and suggested that the Arab summit should take steps to get an Arab nuclear capability. He said that the acquisition of the atomic bomb by the Arabs, if they were exposed to atomic danger, would not await the development of Arab technology. "In the face of an atomic threat from Israel, the Arabs can obtain what they want from the Soviet Union. If the Soviet Union refuses, China might agree. And, if China refuses, the atomic bomb after all is not in an impregnable hideout away from all hands and eyes." However, Heikal noted that Colonel Muammer al-Qadhafi, the Libyan Head of State, offered in 1970 to buy an atomic bomb, but he discovered that atomic bombs were not for sale.<sup>160</sup>

157 See UN Docs. A/5-10/AC.1/3, 26 May 1978; A/34/142, 16 July 1979; and A/RES/34/89, 17 Jan. 1980. For the result of the vote on the resolution, see UN Doc. A/34/PV.97 (prov.), 18 Dec. 1979, p. 77.

158 For an Israeli view and analysis of Arab reactions to Israel's nuclear-weapon potentials, see Yair Evron, "The Arab Position in the Nuclear Field: A Study of Policies Up to 1967", Cooperation and Conflict, Vol. VII, No. 1, 1973, pp. 19-31.

159 The Arab World (a digest of Middle Eastern affairs), 15 Dec. 1973 reported by International Herald Tribune, 17 Dec. 1973.

160 See Heikal, loc. cit. and International Herald Tribune, 24-25 Nov. 1973. See also Mohamed Heikal, The Road to Ramadan (Glasgow: Fontana/Collins, 1976), pp. 74-75.

In Egypt, for example, President Sadat's position as can be deduced from his statements is that while Egypt would not be the first to introduce nuclear weapons into the region, it would not stand by and watch if Israel were to do so. Israel, in this case, would have to bear the consequences.<sup>161</sup>

In view of the above considerations, especially in the aftermath of the October 1973 Middle East war, would Israel find it more productive to base its new strategy on "deterrence through certainty", i.e. the announcement of a nuclear-weapon capability? After all, if the Arabs are so sure that Israel has a nuclear-weapon capability or that it is at least capable of producing nuclear weapons at a short notice, why should not Israel announce such a capability? Would not such an action deter the Arabs from continuing their effort to liberate their occupied territories as well as delay if not sabotage the search for a peaceful settlement of the Middle East conflict?<sup>162</sup>

For psychological reasons, such an announcement could be done through the test explosion of a nuclear-explosive device. Israel will have to weigh, however, the following main considerations:<sup>163</sup>

First, the acquisition of nuclear weapons by the Arabs

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<sup>161</sup> Al Ahram, 23 June 1974, 28 Mar. 1976, 8 Apr. 1976 and 30 Dec. 1976; and Al Gamhouria, 9 Jan. 1975. Former Egyptian Minister of Foreign Affairs, Ismail Fahmy, told quite bluntly a visiting US Senate Delegation in November 1976 that if Israel decided to produce nuclear weapons, Egypt would be forced to do the same. Senate Delegation Report on Non-proliferation in the Middle East, p. 10.

<sup>162</sup> After the June 1967 Middle East war, it was argued by an Arab analyst that an Israeli strategy of nuclear deterrence could seem particularly suited to the double task of imposing a settlement on the Arabs and preserving the post-June 1967 territorial status quo. Jabber, Israel and Nuclear Weapons, p. 133. In a review article of this book, Yair Evron, the Israeli analyst, contested Jabber's views arguing that the main role of nuclear weapons in the Israeli thinking could be the deterrence of an Arab attack and not as an instrument to secure an extension of the Israeli borders. Survival, Vol. XIV, No. 5, Sept./Oct. 1972.

<sup>163</sup> See Jabber, Israel and Nuclear Weapons, pp. 80-81.

through self-help or foreign assistance would be just a question of time. If a mutual deterrence were to be established in the region, there could be no assurance that wars fought with conventional weapons would be excluded or even remain so once they had started.<sup>164</sup> In a nuclear exchange, the damage inflicted upon Israel would be much greater than the damage inflicted upon the Arab world, which is endowed with a strategic depth. A war fought with conventional weapons should not be excluded in the interval between the Israeli acquisition of a nuclear-weapon capability and a similar Arab acquisition. As noted by General André Beaufre in a talk with Mohamed Hassanein Heikal, Israel could not use atomic bombs unless the Arab forces were to penetrate the Israeli territories of pre-June 1967.<sup>165</sup> However, short of such an eventuality, the possibility of using tactical nuclear weapons against an impulsive Arab offensive in the occupied territories should also not be discounted. Whether the Israelis were capable or are capable of manufacturing such sophisticated weapons remains in the realm of expectations, but the weapons appear attractive in more than one respect. Few of these weapons would be effective in repelling a conventional offensive in which military units must concentrate.<sup>166</sup> They could also

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164 Jabber considers that a nuclear balance between Israel and the Arabs would be reasonably stable, as a first strike could hardly be a rational choice from the viewpoint of both parties concerned. *ibid.*, pp. 142-144.

165 Heikal, *loc. cit.*

166 Henry Kissinger notes the following: "To fight a conventional war, military units must concentrate; to be effective during nuclear operations, they must disperse. Units deployed for conventional operations present tempting targets for nuclear attack and may thus invite it. Units deployed for nuclear war are too dispersed to resist an attack with conventional weapons. In all likelihood, it will be impossible to shift from one mode of deployment to another during military operations, particularly if the opponent has introduced nuclear weapons first." Kissinger, *The Troubled Partnership*, pp. 184-185. For an interesting analysis of the tactical uses of nuclear weapons (most relevant to the Arab-Israeli conflict), see David Vital, *The Inequality of States. A Study of the Small Power in International Relations* (Oxford: Clarendon Press, 1967), Chapter 9, pp. 159-182.

be used against Palestinian guerillas, if Israel were to fail to control a generalised guerilla warfare in the occupied West Bank of the Jordan river.<sup>167</sup> The fallout of the use of these weapons may not immediately affect the civilian population, especially if used in sparsely populated areas of the occupied territories.<sup>168</sup> Moreover, the impact of their use on world public opinion would probably be much less than if a Nagasaki-type bomb were to be dropped on an Arab city. In the latter case, Heikal considered that this would not be the end of the Arab-Israeli conflict, but the beginning of a new phase of the conflict which would end up with the end of Israel itself.<sup>169</sup>

Secondly, the strong disapproval of the two super-Powers would be expected. The nuclearization of the Arab-Israeli conflict would create a potential danger of super-Power's direct involvement in a Middle-Eastern nuclear exchange. The "missed confrontation" between the United States and the Soviet Union on the night of 24 October 1973 during the 1973 Middle East war is quite instructive.<sup>170</sup> In view of Israel's dependence on the United States for economic and military assistance, Israel will have to carefully assess possible US reactions to its acquisition of a nuclear-weapon capability. Would the United States disengage from its commitments to

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167 This may explain the worries expressed by Yaser Arafat, the Leader of the Palestine Liberation Organisation, who asserted that the Israelis were preparing a tactical nuclear weapon which could be used in a limited area. Le Monde, 19 Sept. 1974.

168 For a description of the effects of use of tactical nuclear weapons, see Effects of the Possible Use of Nuclear Weapons, paras. 31-36.

169 Heikal, loc. cit.

170 A Soviet note to the United States implying the threat of the dispatch of Soviet troops to enforce the cease-fire in the Suez war zone led to a precautionary alert of US forces around the world on the night of 24 October 1973. For press reports and analyses of this "missed confrontation", see Le Monde, 3 Nov. 1973 and International Herald Tribune, 22 Nov. 1973.

Israel, as suggested by some analysts;<sup>171</sup> or would it in the long run co-operate with it hoping to reduce the chances of nuclear accident or war?<sup>172</sup>

Thirdly, the isolation of Israel in the world arena after the October 1973 war may be further accentuated by a nuclear-weapon posture. International disapproval would be rather severe. While the mild international reactions to the Indian explosion would probably be an important element in Israeli calculations, it should be noted, however, that the case of India is quite different. An Indian "peaceful nuclear explosion" may in the long run be tolerated on the international level for several reasons. India is facing an existing and growing major nuclear-weapon Power in the Asian continent; it is far from being isolated in the world arena, and is still playing an active role in the non-aligned movement; and lastly India maintains its diplomatic relations with its rivals in Asia in spite of its protracted conflicts with them, diplomatic relations which would help in the future to dissipate any misunderstandings or misreadings of Indian moves in the nuclear field.

Fourthly, environmental problems will have to be tackled. Since Israel is a Party to the Partial Test-Ban Treaty, it will have to test underground, unless it decides to give the three-months advance notice for withdrawal as required by the Treaty. The latter course is excluded, since the element of surprise would be compromised. The political and economic pressures which would also come to bear on Israel in the three-months period might hardly be resisted. Moreover, the geographical configurations of Israel do not leave much room for atmospheric testing without great risk of radioactive contamination. Testing underground could be very expensive in

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<sup>171</sup> See, for example, George H. Quester, "Israel and the Nuclear Non-Proliferation Treaty", Bulletin of the Atomic Scientists, Vol. XXV, No. 6, June 1969, p. 44.

<sup>172</sup> See Bader, The United States and the Spread of Nuclear Weapons, p. 109.

the case of Israel in comparison with the Indian case.<sup>173</sup> The low cost of the Indian explosion, which was reported to have attained the figure of £160,000, although hardly convincing, could be explained, inter alia, by the economies of scale of the much larger Indian nuclear programme. Israel will also have to consider whether it would be ready to waste away in a single test a full year's effort of producing plutonium necessary for a twenty-kiloton bomb.

In view of the above considerations, the announcement of a nuclear-weapon capability would not be an easy decision for Israel to make. It would not be much easier for the Arabs either to endure much longer the continuous uncertainty about Israel's nuclear capabilities. This very state of uncertainty may lead to a nuclear-arms race in the Middle East not really desired by one or the other protagonists. Uncertainty can come to an end if Israel adheres to the NPT and submits all its nuclear activities to the application of IAEA safeguards. In order to appease Israel's concern about its future security, the adherence of Israel as well as its Arab neighbours so far non-parties to the Treaty, can be arranged within the context of a comprehensive and final peaceful settlement of the Arab-Israeli conflict. If such a settlement were to be delayed for an unreasonable period of time, the risk of nuclear proliferation in the Middle East might become hard to contain. Parallel to the negotiation of such a settlement, efforts should also be exerted to establish a nuclear-weapon-free zone in the Middle East, which would require the guarantee and support of the five nuclear-weapon States as in the case of the Treaty of Tlatelolco.

The proposal for the establishment of a nuclear-weapon-free zone in the region of the Middle East was for the first time brought before the UN General Assembly at the request

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<sup>173</sup> According to a Swedish study the total costs of testing one twenty-kiloton device underground would amount to \$12 million, and the costs of testing four such devices would amount to \$15 million. Effects of the Possible Use of Nuclear Weapons, para. 59.



of Iran in 1974. Egypt subsequently co-sponsored the proposal.<sup>174</sup> Ever since the adoption of the first resolution on this issue by the General Assembly in 1974, Egypt and Iran supported by some members of the region have pursued the matter at every succeeding session of the Assembly, seeking the adoption of similar resolutions. At the 34th session of the Assembly in 1979, Egypt was alone in introducing the draft resolution; which was adopted unanimously by the Assembly. Consistent with its previous positions on this issue, Israel was the only country to abstain.<sup>175</sup>

Without going in great detail into the discussions and the successive resolutions of the UN General Assembly, we shall merely highlight the basic attitudes of the countries directly involved.

The sponsors of the issue and their supporters view the denuclearization of the Middle East in the following terms:

- A nuclear-weapon-free zone is complimentary to the NPT. Therefore, the adherence to the NPT by all countries concerned is a prerequisite for promoting the objective of denuclearization. Israel is criticised for its refusal to adhere to the NPT, especially when all of her neighbours had ratified or signed the Treaty.

- Pending the establishment of such a zone, all countries concerned should make solemn declarations that they will refrain, on a reciprocal basis, from producing, acquiring or in any other way possessing nuclear weapons and nuclear explosive devices.

- Pending the establishment of the zone, all countries concerned would also declare that they would refrain, on a reciprocal basis, from permitting the stationing of nuclear weapons on their territory by any third party.

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<sup>174</sup> UN Docs. A/9693, 15 July 1974 and A/9693/Add.1, 23 July 1974.

<sup>175</sup> UN Doc. A/RES/34/77, 2 Jan. 1980.

- IAEA safeguards should apply to all the nuclear activities of the countries concerned.

- The declarations made by the countries concerned should be deposited with the UN Security Council. The idea emanated from the discussions at the Tenth Special Session of the UN General Assembly devoted to disarmament in 1978, which in its Final Document expressed the desire that consideration should be given to a Security Council role in advancing the establishment of such a zone.<sup>176</sup> Due regard was also paid to its role under resolution 255 on security assurances.

- Nuclear-weapon States should refrain from any action contrary to the objective of establishing such a zone. On the contrary they should extend their co-operation to the States of the region in this respect.

- The UN Secretary General's role is to continue exploring the possibilities of making progress towards the establishment of the zone.

All along, Israel's position has been that progress in the establishment of the zone would best be achieved by holding direct consultations between the States of the region and ultimately convening a regional conference with a view of concluding a formal, contractual and multilateral convention. In its view the consultation carried out by the UN Secretary General should not be the only way of realizing the objective.

The United States, which has supported every resolution adopted by the Assembly, has leaned to the Israeli position questioning the advisability of asking States to undertake commitments to establish a zone in the region in advance of actual negotiations.

It is obvious that the lack of understanding on this issue is but one facet of the absence of a just, lasting and comprehensive peaceful settlement in the Middle East. Even the peace established between Egypt and Israel after long

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176 See Appendix 22, para. 63(d).

and arduous negotiations has neither led to the relaxation of the worries of Egypt with regard to Israeli nuclear activities nor to the waining of its efforts to bring these activities under international control. Parallel to its 1979 renewed endeavour to establish a nuclear-weapon-free zone in the Middle East, Egypt continued to register at the IAEA's annual meeting of the Technical Assistance Committee in December 1979 its reservation to the technical assistance presented by the Agency to Israel.

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To sum up, the NPT is of a universal character open to the adherence of all States. Provisions of the Treaty in this respect are quite clear and simple. However, ten years after its entry into force on 5 March 1970 the Treaty had not yet reached the stage of universality. The reasons for the slow process towards universality are complex and diverse, as can be deduced from the analysis undertaken by this study. They can be grouped under three main headings: conceptual, economical and security considerations.

Conceptually, the Treaty is refuted by some States because of its discriminatory nature. These States are therefore not expected to become parties to the Treaty unless its conceptual framework is radically changed.

Economically, the adherence of several States, most of which are the industrialised countries of Western Europe, had been delayed mainly because of fear of economic competition and industrial espionage. The Euratom/IAEA Agreement opened the way for the adherence of all these States Members of Euratom which permitted them to participate as full partners in the First NPT Review Conference held in May 1975. However, countries like Japan lagged behind until 1976.

Security considerations have kept at a distance the States which either are not satisfied with the insufficiency

of the security guarantees offered through the machinery of the UN Security Council, or are keen to retain a nuclear-weapon option in case their security is seriously endangered. The China-India-Pakistan triangle and the Arab/Israeli protracted conflict are typical cases which are greatly influenced by security considerations.

In the Asian theatre, the NPT is basically refuted by both China and India, and is not expected to be adhered to by Pakistan after the Indian explosion of 18 May 1974. If the Indian explosions would remain "peaceful" and could be submitted to international observations, and if a nuclear-weapon-free zone could be established in Southern Asia, further proliferation may be averted in this part of the world and beyond.

In the Middle East, prompt preventive measures are most needed before it is too late to halt the proliferation of nuclear weapons. In particular, a comprehensive, just and lasting peaceful settlement of the Arab-Israeli conflict should require the adherence of Israel and its neighbouring countries to the NPT. A nuclear-weapon-free zone in the Middle East would contribute to peace and stability in the region.

If further proliferation can be averted in South Asia and the Middle East, the NPT as a universal treaty may still have a chance to survive. If, on the contrary, efforts fail to contain proliferation in these two regions, inhibitions from "going nuclear" in other parts of the world might no longer prevail.

## CHAPTER 12

### Adaptability to Changing Circumstances : Articles VIII and X

#### Texts :

#### Article VIII

1. Any Party to the Treaty may propose amendments to this Treaty. The text of any proposed amendment shall be submitted to the Depositary Governments which shall circulate it to all Parties to the Treaty. Thereupon, if requested to do so by one-third or more of the Parties to the Treaty, the Depositary Governments shall convene a conference, to which they shall invite all the Parties to the Treaty, to consider such an amendment.

2. Any amendment to this Treaty must be approved by a majority of the votes of all the Parties to the Treaty, including the votes of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. The amendment shall enter into force for each Party that deposits its instrument of ratification of the amendment upon the deposit of such instruments of ratification by a majority of all the Parties, including the instruments of ratification of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. Thereafter, it shall enter into force for any other Party upon the deposit of its instrument of ratification of the amendment.

3. Five years after the entry into force of this Treaty, a conference of Parties to the Treaty shall be held in Geneva, Switzerland, in order to review the operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realized. At intervals of five years thereafter, a majority of the Parties to the Treaty may obtain, by submitting a proposal to this effect to the Depositary Governments, the convening of further conferences with the same objective of reviewing the operation of the Treaty.

## Article X

1. Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests.

2. Twenty-five years after the entry into force of the Treaty, a conference shall be convened to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods. This decision shall be taken by a majority of the Parties to the Treaty.

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Although the adaptability of a treaty to changing and unforeseen circumstances could be entirely left to the general principles of international law, its effectiveness in practice may to a great extent depend on how far it can itself assure, through clear and simple provisions, its adaptability to such circumstances. In the case of the NPT such provisions were primordial in view of the considerable strategic, political, economic and technical considerations involved in its negotiation and implementation.

The adaptability of the NPT to changing and unforeseen circumstances is provided for through the provisions of Articles VIII and X of the Treaty. They relate to duration, amendments, review conferences and withdrawal. While some of these provisions are tailored to those of the Partial Test-Ban Treaty, others are new and possess unique legal features. They reflect, in fact, the various considerations referred to above.

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## 1. Duration

The NPT prescribes an initial duration of twenty-five years. Paragraph 2 of Article X states that:

"Twenty-five years after the entry into force of the Treaty, a conference shall be convened to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods. This decision shall be taken by a majority of the Parties to the Treaty."

The first American treaty draft of 17 August 1965 provided that the NPT "shall remain in force indefinitely".<sup>1</sup> The first Soviet treaty draft of 24 September as well as the first identical treaty drafts of 24 August 1967 prescribed that the NPT "shall be of unlimited duration".<sup>2</sup> The latter provision was identical to that of the Partial Test-Ban Treaty.<sup>3</sup>

Opinion was divided on the "unlimited" or "indefinite" duration of a non-proliferation treaty. Those who favoured the treaty's permanency argued that it would constitute an effective and permanent brake on the proliferation of nuclear weapons.<sup>4</sup> It was considered that a treaty of fixed duration would be subject to disintegration at the end of the prescribed period and hence would be considerably less effective.<sup>5</sup> As to those who objected to the "unlimited" duration of the treaty, they argued that to subscribe to such a commitment seemed hardly conceivable in a field where development was as rapid and unpredictable as that of nuclear science and its technical, economic, political and military implications.<sup>6</sup> It was feared that an unlimited duration of the NPT might

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1 See Appendix 3-A, Article VI, paragraph 1.

2 See Appendix 3-B, Article VI and Appendix 3-D, Article VII.

3 See Appendix 6, Article IV.

4 ENDC/PV. 245, 3 Mar. 1966, p. 10 and ENDC/PV. 294, 16 Mar. 1967, paras. 15-16 (UAR).

5 ENDC/PV. 329, 12 Sept. 1967, para. 26 (Canada).

6 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. 1V, Sec. 21 (ENDC/204, 24 Nov. 1967), para. 5 (Switzerland).

introduce therein an element of weakness rather than of strength, and would deprive it of the credibility which should constitute its strength. As put by the Italian representative at the ENDC, "future generations will have to live, even on a strictly technological level, in a setting very different from the present one. To imprison them in an iron corset, which could not be adjusted to the changing conditions of history, would in our opinion expose that corset to the danger of bursting."<sup>7</sup>

The Italian delegation to the ENDC submitted a formal amendment intended to replace the first paragraph of Article VII of the identical treaty drafts of August 1967.<sup>8</sup> The amendment was later redrafted to read as follows:

"The present treaty shall have a duration of X years. It shall be automatically extended for terms equal to its initial duration for those governments which, subject to six months' notice, shall not have made known their intention to withdraw."<sup>9</sup>

The Italian representative at the ENDC explained that it was preferred to leave an X in the amendment in place of a figure, in order to give the various delegations an opportunity to express their views on the subject. The amendment was submitted as a compromise between the idea of unlimited duration and that of a fixed term.<sup>10</sup> Moreover, it was explained that the withdrawal coinciding with the end of the treaty's term was different than the right of withdrawal provided for to cope with unexpected and exceptionally grave situations. While the latter right would be a dramatic move because of the possibility of a whole series of withdrawals

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7 See ENDC/PV. 341, 24 Oct. 1967, paras. 8-11. It was also pointed out that some countries, when they came to sign a treaty of unlimited duration, might find themselves in constitutional difficulties (para. 11).

8 Ibid., para. 12 and DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add.1, Ann.IV, Sec. 15 (ENDC/200/Rev. 1, 26 Oct. 1967).

9 ENDC/PV. 350, 23 Nov. 1967, para. 9.

10 ENDC/PV. 341, 24 Oct. 1967, para. 12.



by other signatory countries, the former withdrawal was considered by the Italian delegation to be the most effective inducement to the nuclear Powers to take increasingly effective and wide-ranging measures for nuclear disarmament.<sup>11</sup>

With regard to this latter point, it is interesting to note that the Swiss Government in its aide-mémoire to the ENDC on 17 November 1967 made the following coinciding comments:

"... it would be preferable that the Treaty should be concluded for a definite period, at the end of which a review conference would decide about its renewal. During that interval the nuclear-weapon States could adopt specific measures aimed at a limitation of armaments. The non-nuclear-weapon States certainly cannot take the responsibility of tying their hands indefinitely if the nuclear-weapon States fail to arrive at positive results in that direction."<sup>12</sup>

The NATO allies and particularly the Federal Republic of Germany were also not in favour of an unlimited duration.<sup>13</sup>

While remaining mindful of the strength of the arguments in favour of a treaty of unlimited duration, the co-Chairmen had to take into consideration the comments of those who were opposed to a treaty having no limit in time.<sup>14</sup> As a consequence, the provisions of paragraph 2 of Article X quoted at the outset of this chapter were included in the identical treaty drafts of 18 January 1968, provisions which remained unchanged in spite of suggested modifications. In recommending these provisions, the co-Chairmen recognised the widespread desire that the treaty be assured "a life-span adequate

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11 ENDC/PV. 350, 23 Nov. 1967, paras. 10-11.

12 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 21 (ENDC/204, 24 Nov. 1967), para. 5.

13 See Hearings on Arms Control, 1968, pp. 18-19 (William Foster) and p. 202 (Adrian Fisher).

14 William Foster explained that the US would have preferred an unlimited duration, "since whenever there is a deadline there will be an incentive to nations to consider whether they shouldn't go nuclear immediately after the deadline is set." Hearings on Arms Control, 1968, p. 19. The United Kingdom would have also preferred an indefinite duration. ENDC/PV. 358, 23 Jan 1968, paras. 30-31.

to enable it to serve effectively as a stable foundation upon which other vitally-needed measures of nuclear disarmament can be built."<sup>15</sup>

The initial duration of twenty-five years might have also been suggested by the fact that the nuclear era was barely twenty-five years old. The foreseeable changes in the next twenty-five years due to on-going nuclear research, development and innovation seemed at least as great as those which had already occurred.<sup>16</sup>

The twenty-five-year period raised some objections. Spain favoured a period of twenty years following the Treaty's entry into force. It considered the twenty years between the first review conference mentioned in Article VIII of the NPT and the conference mentioned in Article X too long a time for the treaty to be adaptable solely through the procedure laid down for introducing amendments.<sup>17</sup> The Federal Republic of Germany was reported to have preferred five or ten years.<sup>18</sup> Brazil and India considered that a quarter of a century would endorse and legitimise the unrestricted vertical proliferation by the nuclear-weapon States.<sup>19</sup> Tanzania regretted the implications that the developing States would remain in comparative technological backwardness for twenty-five years.<sup>20</sup> Italy re-drafted its previous amendment and submitted it to the ENDC.

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15 ENDC/PV. 357, 18 Jan. 1968, para. 71 (US). See also ENDC/PV. 378, 13 Mar. 1968, para. 16 (US).

16 Willrich, Non-Proliferation Treaty, p. 155.

17 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Sec. 35 (ENDC/219, 27 Feb. 1968).

18 Marie-Françoise Furet, "La République Fédéral d'Allemagne et les armements nucléaires", Revue Générale de Droit International Public, 74e année, No. 2, Avr.-Juin 1970, p. 341, note 67.

19 A/C.1/PV. 1560 (prov.), 3 May 1968, pp. 43-45 (Brazil) and A/C.1/PV. 1567 (prov.), 14 May 1968, p. 66 (India).

20 A/C.1/PV. 1570 (prov.), 17 May 1968, p. 26.

It read as follows:

"The Treaty shall have a duration of 25 years. It shall be renewed automatically for periods equal to its initial duration for all governments which shall not have given six months before the successive dates of its expiry, notice of their intention to withdraw."<sup>21</sup>

The Italian amendment was criticised by both Canada and the United States. The Canadian representative at the ENDC noted that withdrawal was already adequately taken care of in the Treaty. It was regarded undesirable to encourage withdrawal at the end of the first twenty-five years in circumstances in which the withdrawing States would neither participate in the renewal conference nor be required to account for their withdrawal to the Security Council as required by the Treaty.<sup>22</sup> The United States representative while criticising the right to denounce the treaty at the end of twenty-five years without stating any reason, noted that the provision for periodic review did encompass the essential element of flexibility which was in part the aim of the Italian proposal.<sup>23</sup>

The provisions of Article X of the NPT do not indicate on whom the legal duty to convene the conference lies. However, since Article VIII keeps a similar silence with regard to the convening of the first review conference, the steps taken in the preparation of the latter conference, as will be shown below, should be instructive in this respect.

The jurisdictional scope of the contemplated conference appears to be limited to the following three alternatives: the extension of the NPT's duration indefinitely; or for an additional fixed period; or for additional fixed periods. As

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21 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 34 (ENDC/218, 20 Feb. 1968). See also ENDC/PV. 367, 20 Feb. 1968, para. 60.

22 ENDC/PV. 371, 28 Feb. 1968, para. 66.

23 ENDC/PV. 378, 13 Mar. 1968, para. 17.

explained by one analyst the only way to understand the latter alternative "is that the Conference may fix different periods, subjecting them to specified situations."<sup>24</sup> The decision with respect to these alternatives "shall be taken by a majority of the Parties to the Treaty." While the conference is apparently not juridically entitled to terminate the NPT, it has the right to extend the duration of the Treaty "for an additional fixed period" at the end of which there may be no further extensions.

In practice, however, the NPT may quietly recede or become devoid of any meaning if, for example, it fails to achieve meaningful universality, i.e. the adherence of the potential nuclear-weapon Powers; or if more countries actually acquire a nuclear-weapon (or nuclear-explosive) capability; or if the withdrawal clause is heavily resorted to, especially in moments of severe crises or as a result of wars.

The effect of war on the Treaty's duration was, in fact, raised in the American debate on the NPT in connexion with the interpretations of the NPT made by the United States with regard to alliance relationships. One of these interpretations, which were previously referred to in the present study,<sup>25</sup> read as follows:

"It (the NPT) does not deal with arrangements for deployment of nuclear weapons within allied territory as these do not involve any transfer of nuclear weapons or control over them unless and until a decision were made to go to war, at which time the treaty would no longer be controlling."<sup>26</sup> (Emphasis added.)

It must be recalled that this interpretation, among others, was shown to the Soviet Union and key States members of the ENDC, which raised no objection.<sup>27</sup>

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24 K. Narayana Rao, "The Draft Treaty on Non Proliferation of Nuclear Weapons: A Critical Appraisal", p. 234.

25 See Chapter 5.

26 Hearings on NPT, 1968, p. 263.

27 See Chapter 5, note 28.

In the American debate, a distinction was drawn between a general war involving the nuclear Powers and the use of nuclear weapons, and a limited local conflict not involving a nuclear-weapon State. The general war was the one meant by the above interpretation. As explained by the US Secretary of State, Dean Rusk, "this was simply a recognition of what today is almost an element of nature, and that is, in a condition of general war involving the nuclear powers, treaty structures of this kind that were formerly interposed between the parties would be terminated or suspended."<sup>28</sup> From a strictly legal point of view, the termination or suspension of the operation of the Treaty could also be based on its material breach, since the release of nuclear weapons or control over them to the allies of the nuclear-weapon State in case "a decision were made to go to war" would be a violation of Article I of the NPT.

In the case of a limited local conflict not involving a nuclear-weapon Power, Dean Rusk explained that "there would be inhibitions in the treaty against the notion that any kind of conflict or a dispute would automatically relieve that particular country or disputant from the obligations of the treaty. ... It is not intended ... that the mere fact there is an armed clash would operate to relieve a party of its obligations under the treaty. But such party might invoke the withdrawal article ...".<sup>29</sup> In order to support this view, reference was made to the first two paragraphs of the preamble of the NPT which spoke only of nuclear war.<sup>30</sup> As explained by one analyst, "(t)hese introductory paragraphs may indicate an intention that the Treaty not be suspended during hostilities, at least prior to any nuclear exchange."<sup>31</sup>

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28 Hearings on NPT, 1968, p. 27.

29 Ibid., p. 28.

30 Hearings on NPT, 1969, p. 424 (information provided by the US Department of Defence). For the texts of the two paragraphs, see Appendix 3-G.

31 Willrich, Non-Proliferation Treaty, p. 90.

Without going much further into the effects of wars on the NPT, the withdrawal clause offers, in practice, a convenient way for a State Party to the Treaty to relieve itself from the obligations under it not only in case of war but in other events as well. Before embarking, however, on the analysis of this clause, the Treaty's provisions on amendments and review conferences must be dealt with.

## II. Amendments

The procedures for amending the Treaty run through two phases. The first paragraph of Article VIII prescribes the procedures of the first phase in the following terms:

"Any Party to the Treaty may propose amendments to this Treaty. The text of any proposed amendment shall be submitted to the Depository Governments which shall circulate it to all Parties to the Treaty. Thereupon, if requested to do so by one-third or more of the Parties to the Treaty, the Depository Governments shall convene a conference, to which they shall invite all the Parties to the Treaty, to consider such an amendment."

These procedures are almost identical to those prescribed by the first paragraph of Article II of the Partial Test-Ban Treaty.<sup>32</sup> They are also almost identical to those prescribed by the first paragraph of Article IV of the first Soviet treaty draft of 24 September 1965.<sup>33</sup> The first American treaty draft of 17 August 1965 did not include any provisions on amendments, but it did include provisions on the review of the operation of the Treaty, as will be explained below. The provisions of the first paragraph of Article VIII as quoted above were introduced in the first identical treaty drafts of 24 August 1967 and had since then remained unchanged.

Since these procedures are almost identical to those prescribed by the Partial Test-Ban Treaty, it would be quite relevant to point out here that in the course of the hearings

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<sup>32</sup> See Appendix 6.

<sup>33</sup> See Appendix 3-B.

on the latter Treaty before the US Senate Committee on Foreign Relations, the Secretary of State Dean Rusk said that if the Soviet Union, the United Kingdom and the United States (the Original Parties) were agreed on an amendment, they would find the amending process possible without a conference. He added that this would be the simplest and most expeditious way to deal with the problem. Similarly, the Report of the Committee on Foreign Relations to the US Senate stated that the conference was not a necessary part of the amending procedure.<sup>34</sup> These statements should be taken to mean that the actual physical presence of the representatives of States Party to the Treaty in a conference is not absolutely necessary, but should not be interpreted as meaning that the Treaty could be amended without the required majority, which could be arranged through correspondence.<sup>35</sup> Although such a procedure does not appear to be contrary to the spirit of the Test-Ban Treaty or that of the NPT, especially if the amendment proposed is a minor one and can be easily handled through diplomatic channels, it is submitted that the provisions of both treaties should be strictly observed, since an amendment conference might be an opportunity for the States' representatives to discuss informally the state of implementation of both treaties and therefore lay the ground for future improvements. In the case of the NPT, an amendment conference would be particularly fruitful in this respect, since the convening of review conferences beyond the first one requires a lapse of time of at least five years as well as the agreement of the majority of the Parties (and not only the agreement of one-third of the Parties in case of amendments), a majority which "may obtain" the convening of such conferences.

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34 As reported in Schwelb, "The Nuclear Test Ban Treaty and International Law", p. 650.

35 See Ibid., pp. 650-651.

Both the NPT and the Test-Ban Treaty are silent with regard to the time and venue of the amendment conferences. Both Treaties seem to imply that the right on these questions is vested in the three Depository Governments because they convene the conference and invite its participants.<sup>36</sup>

Once the conference is convened the second procedural phase would ensue. In this respect, the second paragraph of Article VIII prescribes the following:

"Any amendment to this Treaty must be approved by a majority of the votes of all the Parties to the Treaty, including the votes of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. The amendment shall enter into force for each Party that deposits its instrument of ratification of the amendment upon the deposit of such instruments of ratification by a majority of all the Parties, including the instruments of ratification of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. Thereafter, it shall enter into force for any other Party upon the deposit of its instrument of ratification of the amendment."

In this second phase the procedures are quite different than those of the Partial Test-Ban Treaty, which are less complicated.<sup>37</sup> The Soviet treaty draft of 24 September 1965 included similar provisions to those of the latter Treaty except that any amendment had to be approved and ratified by "all Parties possessing nuclear weapons".<sup>38</sup>

Article V of the first identical treaty drafts of 24 August 1967 included for the first time provisions similar to

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36 Ibid., p. 650. With regard to the participation in a conference called under Article VIII or even under Article X, the United States preserved the right to object to the participation of an unrecognised entity. A/PV. 1672 (prov.), 12 June 1968, pp. 73-75.

37 See Appendix 6, Article II.2.

38 See Appendix 3-B, Article IV.2.



those of the final text of the Treaty with one important exception. According to the 1967 draft an amendment would have entered into force for all Parties as in the Partial Test-Ban Treaty, whereas in the NPT an amendment would enter into force only for the States which ratify it.

The 1967 draft prompted, in fact, an amendment submitted by Romania<sup>39</sup> and supported by other members of the ENDC,<sup>40</sup> which led since the presentation of the second identical treaty drafts of 18 January 1968 to the present provisions of Article VIII.2 of the NPT.

Commenting on the 1967 draft, the Romanian representative at the ENDC explained that "by resorting to the majority method the procedure for amendment of the treaty would mean abandonment of the essential rule of law which requires in all circumstances the agreement of the States concerned to any kind of international regulation. In the particular case of the non-proliferation treaty, which by its very nature relates to interests of paramount importance for States, to accept such a procedure would mean that the ... non-nuclear countries would be exposing themselves to risks the magnitude and implications of which cannot be foreseen."<sup>41</sup> He went on to say that the concern to give stability to the NPT could not justify a procedure aimed at compelling signatory States to accept treaty amendments with which they were not in agreement.<sup>42</sup>

The only member of the ENDC to have expressed its preference and wish to reintroduce the "old formula" of the 1967 draft was the UAR. Its representative explained, not without merit, that it was difficult to imagine a situation in which obligations stemming from a treaty of such importance would

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39 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 14 (ENDC/199, 19 Oct. 1967).

40 For example, see ENDC/PV. 344, 2 Nov. 1967, para. 14 (Nigeria) and ENDC/PV. 345, 6 Nov. 1967, para. 34 (Canada).

41 ENDC/PV. 348, 16 Nov. 1967, para. 17.

42 Ibid., para. 20.

differ from one State to another according to whether it had or had not ratified the amendments to the treaty. He further explained that the double veto created by Article VIII was a sort of guarantee that only the most generally acceptable amendments would have a chance of being introduced.<sup>43</sup>

However, the "double veto" by any of the nuclear-weapon States Party to the NPT or by any other Party member of the IAEA Board of Governors was a source of concern to some countries. As put by a representative of Argentina, "the conditions set up are too rigid for the treaty to be put into effect, especially in the light of the constant development of nuclear technology and particularly since, in this field, everything indicates that we are still at the beginning of an era and it is very difficult to foresee where it will end."<sup>44</sup> For a representative of another State, Dahomey, a nuclear veto would be legitimate in a treaty concerning exclusively or principally the nuclear Powers - such as a test-ban treaty or a treaty on nuclear disarmament - but not "in a treaty which in the first instance binds the non-nuclear countries."<sup>45</sup>

Throughout the discussions at the ENDC and the UN General Assembly neither explanations were given by the co-authors of the NPT nor were questions raised by any State as to the requirement of the approval and the ratification of amendments by the Parties which happen to be, on the date the amendments are circulated, members of the Board of Governors of the IAEA. This requirement seems to have been based on the crucial role which the Agency is expected to play in implementing the provisions of the Treaty relating to safeguards, peaceful uses of nuclear energy and peaceful nuclear explosions. The requirement that the Party to the Treaty having a veto power

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43 ENDC/PV. 367, 20 Feb. 1968, para. 38.

44 A/C.1/PV. 1572, 22 May 1968, para. 96.

45 A/C.1/PV. 1568 (prov.), 15 May 1968, pp. 54-55. For other expressions of concern, see, for example, A/C.1/PV. 1566 (prov.), 13 May 1968, pp. 59-60 (Cuba) and A/C.1/PV. 1570 (prov.), 17 May 1968, p. 26 (Tanzania).

should be a member of the IAEA Board on the date the amendment is circulated appears to have been based on the assumption that this member at this particular time would be in a better position to assess the circumstances which prompted the submission of the amendment and judge whether or not the amendment is a well-founded and worthy proposition.

In the final analysis, it is unfortunate to have brought together the idea of the entry into force of the amendment only for those who ratify it with the idea of the double veto. It would have been better either to reintroduce the formula of the 1967 draft, as suggested by the UAR representative, which would have guaranteed the continuous application of uniform rules to all the Parties to the NPT, or to drop the double veto, in which case the entry into force of the amendment only for those who ratify it would have been quite understandable in view of the less stringent requirements. However, the former alternative would have been preferable.

#### III. Review Conferences

In dealing with the provisions of paragraph 3 of Article VIII of the NPT on review conferences, we have to distinguish, for the sake of clarity, between the first review conference, which is to be held five years after the entry into force of the Treaty and the periodic review conferences which may be held at intervals of five years.

##### 1. The First Review Conference

The first part of paragraph 3 of Article VIII stipulates that:

"Five years after the entry into force of this Treaty, a conference of Parties to the Treaty shall be held in Geneva, Switzerland, in order to review the operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realized."

The first provision on a review conference appeared in Article VI of the American treaty draft of 17 August 1965,

which prescribed that after a specified period (left blank) "a conference of parties may be held at a date and place to be fixed by agreement of two-thirds of the parties in order to review the operation of the Treaty."<sup>46</sup> As explained by the representative of the United States at the ENDC, this provision was included in part because of the wide concern expressed by many participants in the discussions of the ENDC and in the Disarmament Commission that a treaty such as the NPT should be accompanied by progress to halt and reduce rising nuclear stocks.<sup>47</sup> Ever since the presentation of this first draft of a non-proliferation treaty and throughout the NPT negotiations and after its opening for signature the relevance of the review conference to the achievement of measures to halt the nuclear arms race and nuclear disarmament had been persistently emphasised by the two super-Powers and, more particularly, by the United States.<sup>48</sup>

The Soviet treaty draft of 24 September 1965 did not include any provision on reviewing the operation of the NPT, but it did include, as mentioned above, provisions on amendments. Since the first US draft also did not provide for amendments, the UAR delegation at the ENDC suggested combining the idea of amendments with the idea of review.<sup>49</sup> Thus, the first identical treaty drafts of 24 August 1967 combined in one article provisions on amendments as well as on review. With regard to the latter, the provisions of paragraph 3 of Article V were definite in comparison with those of the 1965 American draft. They read as follows:

"Five years after the entry into force of this Treaty, a conference of Parties to the Treaty

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46 See Appendix 3-A, Article VI.2.

47 ENDC/PV. 224, 17 Aug. 1965, p. 20.

48 For example, see GAOR, 20th Sess., 1st Cttee, 1366th mtg, 27 Oct. 1965, para. 18; ENDC/PV. 325, 24 Aug. 1967, para. 20; A/C.1/PV. 1556 (prov.), 26 Apr. 1968, p. 33; and Hearings on Arms Control, 1968, p. 69 (Adrian Fisher).

49 ENDC/PV. 245, 3 Mar. 1966, p. 11.

shall be held in Geneva, Switzerland, in order to review the operation of this Treaty with a view to assuring that the purposes and provisions of the Treaty are being observed."

The only differences between these provisions and those of the final text of the Treaty are the insertion of the words "of the Preamble" after the word "purposes" and the substitution of the word "realized" for the word "observed". These changes were suggested by the United Kingdom delegation at the ENDC before and after the introduction for the first time of Article VI in the identical treaty drafts of 18 January 1968.<sup>50</sup> As explained by the UK representative after the submission of the latter drafts "the preamble is ... wider than ... Article VI in the disarmament field and indicates in some detail what needs to be done, as well as containing an important declaration of intent to achieve at the earliest possible date the cessation of the nuclear arms race. It also refers to other important matters."<sup>51</sup> The UK's suggested changes were supported by several delegations,<sup>52</sup> and finally incorporated in the Joint treaty draft of 11 March 1968.<sup>53</sup>

Article VIII.3 raises several pertinent questions relating to the convening of the review conference, the participation at the conference, and its terms of reference and procedures.

50 ENDC/PV. 337, 10 Oct. 1967, paras. 51 and 52; ENDC/203, 22 Nov. 1967; ENDC/PV. 358, 23 Jan. 1968, para. 26; and DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 20 (ENDC/203/Rev. 1, 22 Feb. 1968).

51 ENDC/PV. 358, 23 Jan. 1968, para. 26.

52 See ENDC/PV. 363, 8 Feb. 1968, para. 16 and ENDC/PV. 373, 5 Mar. 1968, para. 8 (Sweden); ENDC/PV. 367, 20 Feb. 1968, para. 39 (UAR); and ENDC/PV. 371, 28 Feb. 1968, paras. 54-55 (Canada).

53 Brazil, in its first set of amendments to the identical treaty drafts of 1967, also proposed an amendment to the provisions of Article V relating to the review conference, an amendment which layed stress on the relevance of the conference to disarmament. The amendment was not reintroduced in Brazil's second set of amendments to the identical treaty drafts of 1968. See DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 16 (ENDC/201, 31 Oct. 1967), para. 6 and Sec. 17 (ENDC/201/Rev. 2, 13 Feb. 1968).

With regard to the convening of the conference, it had to take place in Geneva five years after the NPT's entry into force. Since the NPT entered into force on 5 March 1970, the conference was convened on 5 May 1975 for a period of four weeks. But as pointed out earlier, Article VIII did not indicate on whom the responsibility to convene the conference lied. This question had been resolved by the establishment of a Preparatory Committee formed of Parties to the NPT serving on the Board of Governors of the IAEA or represented at the CCD, which had undertaken the task of preparing the review conference.<sup>54</sup> The Preparatory Committee had held three sessions, from 1 to 8 April 1974, from 26 August to 6 September 1974 and from 3 to 14 February 1975. The Committee, meeting in Geneva, decided in its second session that the conference would convene on 5 May 1975. The Committee prepared a draft agenda for the Conference as well as a schedule for the division of the costs of the Conference among the participants. It decided to issue, as pre-session Conference documents, working papers pertaining to the implementation of various provisions of the Treaty, submitted to the Committee by the UN Secretary General, the IAEA Director General and the OPANAL in response to invitation from the Committee and subsequently updated and revised.

As to the question of participation at the conference, it could be inferred from Article VIII that only Parties to the NPT would have the right to participate. As to whether non-parties to the Treaty could participate at the conference as observers, this question had been tackled by the Preparatory Committee in drafting the Conference's rules of procedure. According to paragraph 1 of Rule 44, States which had signed

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<sup>54</sup> See GA Res. 3184 B (XXVIII), 18 Dec. 1973 in UN Doc. A/RES/3184 (XXVIII), 11 Feb. 1974. The Committee in its third session was composed of 32 members: Australia, Bulgaria, Canada, Costa Rica, Czechoslovakia, Denmark, Ethiopia, Gabon, the GDR, Ghana, Hungary, Iran, Iraq, Ireland, Lebanon, Mexico, Mongolia, Morocco, Nigeria, Peru, Phillippines, Poland, Romania, Sudan, Sweden, Thailand, the USSR, the UK, the US, Uruguay and Yugoslavia.

the NPT but had not ratified it were allowed to participate in the Conference without taking part in its decisions. With regard to the States which had not even signed the Treaty, they were allowed, according to paragraph 2 of Rule 44, to apply for participation as observers. However, the latter States were not allowed to address the meetings of the Conference. They were merely entitled to submit their views in writing. Some countries like Pakistan considered their participation under such conditions unacceptable if not useless, and therefore decided not to take part.

It was quite a positive step to allow non-parties, especially those who had signed,<sup>55</sup> to participate in the conference. It was a unique opportunity to examine the case of these States, which could only be usefully done in their presence and with their participation. It could have been argued that the participation of the non-adherents to the Treaty, especially those vehemently opposed to it, would have constituted a threat to the conference; but would it not have been a greater threat to deprive those who needed to be heard or even convinced of the merits of the NPT to be present at the conference? For this reason it would have been wiser not to discriminate between signatories and non-signatories. The latter should have at least been allowed to address the meetings of the Conference on equal footing with the others.

Only fifty-eight out of ninety-five States Parties then to the NPT participated in the Conference. One of the Parties, Iraq, attended the Conference as an observer at its own request. Seven signatory States also took part, namely Egypt, Japan, Panama, Switzerland, Trinidad and Tobago,

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<sup>55</sup> It should be noted in this respect that a State which has signed a treaty is obliged to refrain from acts which would defeat the object and purpose of the treaty until "it shall have made its intention clear not to become a party to the treaty." See Article 18 of the Vienna Convention on the Law of Treaties. UN Doc. A/CONF. 39/27 in United Nations Conference on the Law of Treaties, op. cit., p. 291.

Turkey and Venezuela. As of 1 January 1980 three of them had not yet ratified the Treaty, namely Egypt, Trinidad and Tobago and Turkey. Seven additional States, non-signatories, were accorded the observer status, namely Algeria, Argentina, Brazil, Cuba, Israel, South Africa and Spain. It is significant that by 1 January 1980 none of them had acceded to the Treaty.

The terms of reference of the conference are "to review the operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realized." In view of the particular relevance of the review conference to disarmament, as emphasised by the co-authors of the Treaty and as manifested by the UK suggestions, some States found it necessary to point out that the review conference should also deal with the peaceful uses of nuclear energy and the implementation of Article IV and V of the Treaty.<sup>56</sup> It is quite obvious from the analysis undertaken throughout this study that the 1975 conference was entitled not only to review the operation of the treaty in all its aspects but also to consider any other question, the examination of which was found helpful in rendering the Treaty more effective.

Closely related to the terms of reference of the conference is the question of knowing whether the latter was entitled to introduce amendments to the Treaty. There was general agreement at the 1975 Conference that a review conference is not an amendment conference, which is provided for in paragraph 1 of Article VIII. Many delegations found it important to emphasize this aspect as a warning to avoid misunderstanding on the part of any of the participants or to refute certain proposals found to imply or implicate an amendment to the Treaty. A case in point, are the three Protocols on disarmament and security assurances which were proposed to be attached to the NPT.

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<sup>56</sup> For example, see ENDC/PV. 336, 5 Oct. 1967, para. 50 (Ethiopia); A/C.1/PV. 1566 (prov.), 13 May 1968, p. 38 (Philippines); and A/C.1/PV. 1569 (prov.), 16 May 1968, p. 76 (Chile).



The review conference may pave the way later to the introduction of amendments to the NPT in accordance with the provisions of paragraphs 1 and 2 of Article VIII. However, to negate to the conference the authority to examine and introduce amendments to the Treaty had deprived it much of a "raison d'être" and effectiveness.

Lastly, with regard to the procedures to be followed by the review conference in adopting its decisions, the Nigerian delegation at the ENDC proposed the insertion of the following sentence at the end of Article VIII:

"The findings of the review conferences shall be adopted<sup>57</sup> by a majority of signatory States present."

The United States saw no need for such a provision. As explained by its representative at the ENDC, "(t)here should be no difficulty for a majority of signatories, or for that matter any group of parties, making known at a review conference any collective view they may have."<sup>58</sup>

In the rules of procedure worked out by the Preparatory Committee and adopted without any significant change by the Review Conference in 1975, Rule 28 prescribes in its first paragraph that "(d)ecisions on matters of procedure and in elections shall be taken by a majority of representatives present and voting."

On issues of substance, paragraph 2 of Rule 28 states that "the task of the Review Conference being to review the operation of the Treaty with a view to assuring that the purpose of the preamble and the provisions of the Treaty are being realized, and thus to strengthen its effectiveness, every effort should be made to reach agreement on substantive

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57 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 36 (ENDC/220, 28 Feb. 1968) and ENDC/PV. 371, 28 Feb. 1968, para. 19.

58 ENDC/PV. 378, 13 Mar. 1968, para. 17. In the following day, Nigeria reintroduced its proposal with minor drafting changes. DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 37 (ENDC/220/Rev. 1, 14 Mar. 1968).

matters by means of consensus. There should be no voting on such matters until all efforts to achieve consensus have been exhausted." Rule 28 went on prescribing a mechanism that appeared to have been devised to delay if not prevent altogether taking votes.

The Conference in its final plenary meeting, on 30 May 1975, adopted by consensus its Final Declaration based on the draft declaration submitted by the President of the Conference on the preceding day. In view of the difficulties encountered in reaching such a consensus, difficulties that we have dwelt on in the course of this study, a great number of participants at the Conference had issued interpretative statements that were attached upon their request to the Final Declaration. As pointed out earlier, Mexico on behalf of the Group of 77 Parties to the NPT had even asked that their interpretative statement, especially with regard to the three Protocols on disarmament and security assurances, be attached immediately following the text of the Final Declaration. Because of their importance, all interpretative statements are reproduced in Appendix 17 to this study next to the Final Declaration.

Apart from the rules of procedure relating to participation and voting, the majority of the rules are not so uncommon and very similar to other rules of procedure devised for International conferences. What may be of interest here are the rules of procedure pertaining to the organization of the Conference. The rules established the following Committees:

- Two Main Committees for the performance of the Conference functions. The first committee, Committee I, was in charge of disarmament and security issues. Committee II was in charge of safeguards and the peaceful uses of nuclear energy.
- A General Committee chaired by the President of the Conference and composed of the Chairman of the Conference's two Main Committees, its Drafting Committee and its Credentials Committee, as well as the 26 Vice-Presidents of the Confer-

ence. The General Committee's functions were to assist the President in the general conduct of the business of the Conference and, subject to the decisions of the Conference, to ensure the co-ordination of its work.

- A Drafting Committee, composed of representatives of the same 31 States Parties represented on the General Committee.

- A Credentials Committee, composed of a Chairman and two Vice Chairmen elected by the Conference, and six other members appointed by the Conference on the proposal of the President.

## 2. Periodic Review Conferences

The second part of paragraph 3 of Article VIII provides that:

"At intervals of five years thereafter, a majority of the Parties to the Treaty may obtain, by submitting a proposal to this effect to the Depositary Governments, the convening of further conferences with the same objective of reviewing the operation of the Treaty."

The idea of periodic review conferences came up after the submission of the first identical treaty drafts of 24 August 1967, which already contained provisions on holding a review conference five years after the Treaty's entry into force. There were two trends on the question of holding periodic review conferences. One tendency was in favour of mandatory and automatic convening of such conferences. The other, while in agreement with the idea of such conferences, was in favour of a less tight approach.

Romania, which was the first country to have put forward a formal proposal on holding periodic review conferences, was in favour of mandatory conferences. It proposed the insertion of a new paragraph in Article V of the identical treaty drafts of 1967, which read as follows:

"Such conferences shall be convened thereafter periodically every five years, to review the

manner in which the obligations assumed by all the Parties to this Treaty are carried out."<sup>59</sup> (Emphasis added.)

Romania reintroduced its proposal after the submission of the second identical treaty drafts of 18 January 1968, which remained silent on periodic review conferences.<sup>60</sup>

Another formal proposal, which was in line with the Romanian proposal, was submitted by Italy. It proposed the amendment of paragraph 3 of Article VIII of the identical treaty drafts of 1968 to read as follows:

"every five years after the entry into force of this Treaty, a conference of Parties to the Treaty shall be held ..."<sup>61</sup> (Emphasis added.)

The Italian representative at the ENDC explained that "it would be preferable, in the interest of the stability of the treaty, to provide an automatic periodicity - every five years - for such conferences. This would enable all signatories to the treaty to meet regularly, to examine all the disputes which might arise in applying the articles of the treaty and the paragraphs of the preamble and to seek for common solutions, and lastly, to examine and remedy any violations. In that way the periodic conferences would be the most effective instrument to guarantee for all nations of the proper working of the treaty in relation to its ultimate objectives."<sup>62</sup>

A number of other States, without opting for the Romanian or the Italian proposal, were also in favour of mandatory and automatic periodic review conferences.<sup>63</sup>

59 Ibid., Sec. 14 (ENDC/199, 19 Oct. 1967). It should be noted, however, that Burma was the first country to have advanced the idea of periodic review. ENDC/PV. 337, 10 Oct. 1967, para. 20.

60 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Sec. 40 (ENDC/223/Rev. 1, 1 Mar. 1968).

61 Ibid. Sec. 34 (ENDC/218, 20 Feb. 1968).

62 ENDC/PV. 367, 20 Feb. 1968, para. 59.

63 For example, see ENDC/PV. 337, 10 Oct. 1967, para. 20 (Burma); DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 35 (ENDC/219, 27 Feb. 1968 (Spain));

With regard to the second trend, a Swedish proposal led to the present wording of Article VIII on periodic review conferences. In fact, the present wording is identical to the Swedish proposal,<sup>64</sup> in spite of the fact that the Swedish delegation at the ENDC accepted some changes or wording to its proposal,<sup>65</sup> changes which were suggested by the United Kingdom delegation. It suggested the following wording for the Swedish proposal:

"At intervals of five years thereafter, if then requested to do so by a majority of the Parties to the Treaty, the Depositary Governments shall convene a further such conference at the same place and for the same purposes."<sup>66</sup> (Emphasis added.)

There are two basic differences between the latter wording and that of the present Treaty text. First, according to the UK formula, the Depositary Governments would have had to convene the conference if a majority of the Parties so requests, whereas in the present formula this majority "may obtain" the convening of such a conference, by submitting a proposal to this effect to the Depositary Governments. Secondly, the UK formula would have made Geneva the site of future periodic review conferences, whereas the present formula seems to have preferred flexibility on this point.

Upon the incorporation of the original Swedish proposal in the text of the joint treaty draft of 11 March 1968, the US representative at the ENDC, speaking on behalf of his delegation, explained the following:

"... we did not think it would be desirable to limit ourselves inflexibly to a review conference at precise five-yearly intervals after the

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A/C.1/PV. 1567 (prov.), 14 May 1968, p. 31 (El Salvador); and A/C.1/PV. 1571 (prov.), 20 May 1968, p. 48 (Belgium).

64 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. 1V, Sec. 31 (ENDC/215, 8 Feb. 1968). See also ENDC/PV. 363, 8 Feb. 1968, paras. 14-15. The proposal was quickly supported by Ethiopia. ENDC/PV. 364, 13 Feb. 1968, para. 51.

65 ENDC/PV. 373, 5 Mar. 1968, para. 7.

66 ENDC/PV. 369, 22 Feb. 1968, paras. 28-29.

treaty's entry into force. It might well be that the parties, after the first review conference, would not feel a genuine need for review precisely five years later. They might wish instead to hold open the possibility of a conference six, seven or even eight years later. ... the provision that we have included would also enable us to adjust the exact date for a conference in accordance with international circumstances at that time. In any event, conferences can be held at five-yearly intervals if the majority so desires."<sup>67</sup>

In spite of these reassuring remarks made by one of the co-authors of the Treaty, it would have been preferable if conferences were to be convened automatically. As pertinently pointed out by the representative of Spain at the first Committee of the UN General Assembly, the possibility of a periodic review conference under the present draft "would require diplomatic negotiations of a very complicated nature before it was convened."<sup>68</sup>

However, the difficulty had been overcome. The Final Declaration of the 1975 NPT Review Conference in the section entitled "Review of Article VIII" contained the following statement:

"The States Party to the Treaty participating in the Conference propose to the Depositary Governments that a second Conference to review the operation of the Treaty be convened in 1980. The Conference accordingly invites States Party to the Treaty which are Members of the United Nations to request the Secretary-General of the United Nations to include the following item in the provisional agenda of the thirty-third session of the General Assembly: 'Implementation of the conclusions of the first Review Conference of the Parties

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67 ENDC/PV. 376, 11 Mar. 1968, para. 46. The Polish representative at the ENDC also expressed the view that periodic conferences would be justified only if exceptional circumstances required them. The aim should be, in his view, "not to institutionalize the periodic meetings, but to create a machinery sufficiently flexible to facilitate adaptations which might appear necessary in the light of experience." ENDC/PV. 369, 22 Feb. 1968.

68 A/C.1/PV. 1569 (prov.), 16 May 1968, p. 86.

to the Treaty on the Non-Proliferation of Nuclear Weapons and establishment of a preparatory committee for the second Conference.'"

At its thirty-third session the UN General Assembly in 1978, in resolution 33/57, noted that, following appropriate consultations, a Preparatory Committee for such a Conference had been formed of parties to the Treaty serving on the Board of Governors of the International Atomic Energy Agency or represented on the Committee on Disarmament. The same concept of representation of 1975 was re-introduced.

The Preparatory Committee decided to hold three sessions in Geneva from 17 to 20 April 1979, 20 to 24 August 1979 and 24 March to 3 April 1980.

The Committee is investigating the same kind of issues previously investigated by its predecessor in 1974-1975. They relate to dates and venue of the Conference, the Agenda, division of costs, procedures, discussion of background papers, and the preparation of the final document or documents of the Review Conference.

As to dates and venue, the Committee decided to arrange for the Review Conference to be held in Geneva from 11 August to 5 September 1980. With regard to the Agenda of the Conference, it is being examined on the basis of the agenda adopted by the 1975 NPT Review Conference. The procedures of the latter were generally found adequate for the Second Conference. Background papers on NPT implementation prepared by the UN and IAEA Secretariats as well as by OPANAL are being discussed and revised. The structure and main elements of the final document or documents are under consideration.

#### IV. Withdrawal

Ever since the conclusion of the Partial Test-Ban Treaty in 1963,<sup>69</sup> a withdrawal clause has become a common feature of

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<sup>69</sup> See Appendix 6, Article IV,

all international arms control agreements concluded so far.<sup>70</sup> Although the modalities of withdrawal vary from one agreement to another, the NPT as well as the succeeding international arms control agreements are largely based on the withdrawal clause of the Test-Ban Treaty.

As far as the NPT is concerned, the first paragraph of Article X reads as follows:

"Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests."

While the first part of this paragraph is identical to the first part of the Test-Ban Treaty's withdrawal clause, the remaining parts of both are not quite the same. As will be shown below, the NPT contains two important additions.

Except for drafting changes, the final text of the withdrawal clause in the NPT can be said to be identical to the one provided in the first American treaty draft of 17 August 1965.<sup>71</sup> The Soviet treaty draft of 24 September 1974 included an identical clause to that of the Test-Ban Treaty.<sup>72</sup> Ever since its inclusion in the identical treaty drafts of 24 August 1967, the clause had remained unchanged, in spite of the several amendments which were proposed to it.

The analysis of the withdrawal clause shall cover the right

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70 For example, see Article XVI of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies in GA Res. 2222 (XXI), 19 Dec. 1966, Ann. in GAOR, 21st Sess., Suppl. No. 16 (A/6316), pp. 13-15 and Article 30 of the Treaty of Tlatelolco in Appendix 8 of the present study.

71 See Appendix 3-A, Article VI.

72 See Appendix 3-B, Article VI.



to withdraw, the grounds for withdrawal, the procedures to be followed after a decision has been taken to withdraw and the nature of the clause itself as it is formulated in the NPT.

### 1. The Right to Withdraw

Article X of the NPT affirms that each Party in exercising its national sovereignty has the right to withdraw from the Treaty. Since this right has been previously affirmed in the Partial Test-Ban Treaty, it would be quite relevant here to trace back its origins in the negotiating history of the latter.

Adrian Fisher, the leading American disarmament negotiator, who was a member of the American delegation sent to Moscow to negotiate the test ban, explained that the Soviets did not think that a detailed clause providing for withdrawal suggested by the Americans was necessary. They took the position that any country had the right to disregard a treaty if it was contrary to its supreme national interests. "They also took the position, initially, that a withdrawal clause in the treaty was not acceptable, since its inclusion might cast some doubt as to the validity of their position that this right was an inherent right because this inclusion would imply that such a clause was necessary and that the right to withdraw would not exist if it were spelled out. The United States delegation, with the problem of Senate ratification in mind insisted that the treaty had to be clear on its face on this point. A compromise was worked out whereby the right of withdrawal was made clear by the text of the Treaty ... but was described as a right which was recognized as an exercise of the 'national sovereignty' of the Party proposing to withdraw in the manner contemplated by Article IV."<sup>73</sup>

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<sup>73</sup> Adrian Fisher, "Outlawry of War and Disarmament", Collected Courses of The Hague Academy of International Law, Vol. 133, 1971 (II), p. 394. See also the statements made by the US Secretary of State Dean Rusk at the US Senate Committee on Foreign Relations. Hearings on Nuclear Test Ban Treaty, pp. 27-28 and 50. One analyst notes that the theory expounded by the Soviet negotiators during the

As pointed out by Fisher, under the formulation reached there was agreement on the result, and each of the parties to the negotiation could point to the fact that the language of the Treaty was consistent with its theory as to the basis on which this result - the right to withdraw - existed. The US could say that the Treaty was clear on its face as to the manner in which withdrawal could be effected. The Soviets could say that the right to withdraw from a treaty when supreme national interests were jeopardized, had been recognized by the treaty as a right inherent in national sovereignty.<sup>74</sup>

It has been pointed out that the danger of the use or abuse of the words "national sovereignty" resides in what may be deduced from it as some novel principle of general application, a principle which would be destructive of international law.<sup>75</sup> As rightly noted, these words must be read in the light of the legislative history of the Test-Ban Treaty, as a part of hasty political compromise rather than as a reflection of a general principle of treaty law.<sup>76</sup> After all, the first paragraph of Article 56 of the Vienna Convention on the Law of Treaties stipulates that:

"A treaty which contains no provision regarding its termination and which does not provide for denunciation or withdrawal is not subject to denunciation unless:

(a) it is established that the parties intended to admit the possibility of denunciation or withdrawal; or

(b) a right of denunciation or withdrawal may be implied by the nature of the treaty."<sup>77</sup>

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Test-Ban negotiations is not the one which Soviet lawyers usually support in their capacities as writers and legal scholars. Schwelb, "The Nuclear Test Ban Treaty and International Law", p. 661.

74 Fisher "Outlawry of War and Disarmament", p. 394.

75 Schwelb, "The Nuclear Test Ban Treaty and International Law", p. 661.

76 Stein, "Impact of New Weapons Technology on International Law: Selected Aspects", p. 369.

77 UN Doc. A/CONF. 39/27 in United Nations Conference on the Law of Treaties, op. cit., p. 292.

During the NPT negotiations a very limited number of countries objected to the right of withdrawal, and on grounds which were diametrically opposed to those initially expounded by the Soviet Union when it was negotiating the Test-Ban Treaty. It was feared that Article X would introduce an opportunity for abuse,<sup>78</sup> limit the scope and even the purpose of the NPT in establishing a climate of confidence between nations,<sup>79</sup> or diminish the feeling of security.<sup>80</sup> Other countries had at least tried to limit the exercise of this right to the bare minimum, as will be shown in the following section.

## 2. Grounds for Withdrawal

Each Party to the Treaty shall have the right to withdraw "if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country." Since this phraseology is identical to that of the Partial Test-Ban Treaty, it would also be quite pertinent here, before embarking on discussing the grounds for withdrawal under the NPT, to trace back the negotiating history of the Test-Ban Treaty in this respect.

The United Kingdom and the United States draft treaty on the test-ban which was before the delegates of the three nuclear Powers negotiating at Moscow in the summer of 1963,<sup>81</sup> contained the following grounds for withdrawal for any party to the treaty:

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78 A/C.1/PV. 1570 (prov.), 17 May 1968, p. 27 (Tanzania).

79 GAOR, 20th Sess., 1st Cttee, 1367th mtg, 28 Oct. 1965, para. 20 (Togo).

80 A/C.1/PV. 1563 (prov.), 8 May 1968, p. 17 (Ghana). The representative of Ghana pointed out that it was strange that such an important treaty, seeking to create a feeling of security against nuclear attack or threat, should include a withdrawal clause. The latter was considered to be limiting the feeling of security which the guarantor nuclear Powers sought to offer. For Ghana what was more necessary was a more binding treaty blocking such a loop-hole.

81 The treaty draft was previously submitted on 27 August 1962 at the ENDC in Geneva. ENDC/58, 27 Aug. 1962.

- The non-fulfillment of any other party of its obligations under the treaty.

- The conduct of nuclear explosions by a State not party to the treaty under circumstances which might jeopardize the withdrawing party's national security.

- The occurrence of nuclear explosions under circumstances in which it was not possible to identify the State conducting the explosions and that such explosions, if conducted by a party to the treaty, would violate the treaty or, if not conducted by a party, might jeopardize the withdrawing party's national security.<sup>82</sup>

These grounds for withdrawal were not contested by the Soviet delegates, but as they would have included testing by potential nuclear Powers the Soviet delegates apparently wanted to avoid pointing too directly at the People's Republic of China. The compromise ultimately suggested by the United States and accepted by the other Parties, was to insert in Article IV of the Treaty the qualifying phrase "related to the subject matter of this Treaty" after the words "extraordinary events".<sup>83</sup> US Secretary of State Dean Rush explained at the US Senate Committee on Foreign Relations that it was not desirable to try to find the exact boundaries on these extraordinary events related to the subject matter of the Treaty in advance. "This flexibility was something which we wanted and which the other side also wanted."<sup>84</sup> As to the words "supreme interests" (jeopardized by such extraordinary events), they replaced the words "national security" of the 27 August 1962 draft. As noted by one analyst, the words "supreme interests" might well have had their origins in the 1962 Nassau agreement.<sup>85</sup>

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82 Ibid., Article III.

83 Jacobson and Stein, op. cit., pp. 457-458.

84 Hearings on Nuclear Test Ban Treaty, p. 51.

85 Willrich, Non-Proliferation Treaty, p. 164. Willrich cites the following portion of the Nassau Communiqué by President John Kennedy and Prime Minister Harold Macmillan on 21 December 1962: "The Prime Minister made it clear that except where Her Majesty's Govern-

In view of the above background and considerations, the existence of the extraordinary events is left completely to the decision of the withdrawing Party. Even in case of a violation, which can be invoked as an independent ground for the suspension or termination of the Treaty under the general principles of the law of treaties, the Party may prefer to chose to exercise its right of withdrawal under the Treaty for reasons which will be explained later in connexion with the NPT. It suffices to mention here that in the opinion expressed by the legal adviser of the US Department of State, the United States could treat the violation as an "extraordinary event" within the meaning of Article IV of the Partial Test-Ban Treaty.<sup>86</sup>

Turning to the negotiating history of the NPT, it is quite significant that in spite of the lack of definite interpretations by the two co-authors of the Treaty of the meaning of "extraordinary events related to the subject matter of this Treaty", violation of (or non-compliance with) the Treaty as a ground for withdrawal figured prominently in explanations given by US officials.<sup>87</sup> Other possible grounds mentioned more particularly by Secretary of State Dean Rusk

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ment may decide that supreme national interests are at stake, these British forces will be used for the purposes of international defence of the Western Alliance in all circumstances." (Emphasis added.) See Chapter 4 of the present study.

<sup>86</sup> Hearings on Nuclear Test Ban Treaty, p. 37.

<sup>87</sup> For example, see GAOR, 20th Sess., 1st Cttee, 1366th mtg, 27 Oct. 1965, para. 18 (William Foster); Hearings on Arms Control, 1968, p. 74 (Adrian Fisher); Hearings on NPT, 1968, p. 78 (Chairman of Joint Chiefs of Staff, General Earle G. Wheeler); and Hearings on NPT, 1969, p. 367 (Secretary of State William Rogers). It should be pointed out, however, that sometimes it was not clear whether withdrawal was meant to be in exercise of the right referred to in the NPT or as a right under the general principles of the law of treaties in cases of material breach, for example.

were the eruption of wars, as previously mentioned above,<sup>88</sup> and "if NATO were to dissolve".<sup>89</sup>

However, with regard to the NPT, the opportunity was offered to the non-nuclear-weapon States not only to express their views on what constituted legitimate grounds for withdrawal, but also to contribute to the formulation of the withdrawal clause in this respect.

Among the non-aligned members of the ENDC, the UAR was the member most keen on restricting the grounds for withdrawal. Its representative pointed out that withdrawal from the NPT "should not be a matter of absolute discretionary power but should depend on non-observance of the treaty arising from its non-application or violation by a contracting party, or from the fact that a third State is supplying nuclear weapons to some other State."<sup>90</sup> He explained that it was inconceivable to leave open the door to any withdrawal from such a treaty, because it would immediately lose its credibility.<sup>91</sup>

The connexion between reviewing the operation of the NPT and withdrawal had been made by some members of the ENDC with regard to the fulfillment of the obligations relating to disarmament. As put by the representative of Sweden, "(1) it would seem reasonable that, if it is manifest at a review conference that the intentions of the treaty to achieve cessation of the nuclear arms race and to obtain nuclear disarmament have in reality been blatantly disregarded, parties to the treaty may come to regard this an extraordinary event jeopardizing their

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88 See Hearings on NPT, 1968, pp. 27-28.

89 Ibid., p. 43.

90 ENDC/PV. 245, 3 Mar. 1966, p. 10. See also ENDC/PV. 294, 16 Mar. 1967, para. 16.

91 ENDC/PV. 367, 20 Feb. 1968, para. 43. In the same spirit of restriction, Australia, for example, regarded withdrawal as an essential ultimate resort for non-nuclear countries which might be faced with the prospect of aggression. A/C.1/PV. 1570 (prov.), 17 May 1968, p. 11.

own supreme interests..."<sup>92</sup> Burma even suggested to revise the withdrawal clause so as to make failure to fulfil in good faith the provisions of the article on nuclear disarmament a basis for withdrawal.<sup>93</sup>

Formal proposals for amending the withdrawal clause, as far as delimiting the grounds for withdrawal, were made by two other members of the ENDC, Brazil and Nigeria. After the submission of the identical treaty drafts of 24 August 1967, Brazil proposed to amend Article VII to read as follows:

"... Each Party shall ... have the right to withdraw ... if it decides that there have arisen or may arise circumstances related with the subject matter of this Treaty which may affect the supreme interest of its country..."<sup>94</sup> (Emphasis added.)

The Brazilian amendment was reintroduced after the submission of the identical treaty drafts of 18 January 1968.<sup>95</sup> The amendment did not receive much attention at the ENDC, except that the Polish representative at the ENDC criticised it on the ground that withdrawal in that case would not depend on objective and verifiable facts but could be based on arbitrary hypotheses. The American representative made similar comments.<sup>96</sup>

As to Nigeria, it had tried first to introduce more details into Article VII of the identical treaty drafts of 24 August 1967. The grounds for withdrawal were:

"(a) That the aims of the Treaty are being frustrated;

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<sup>92</sup> ENDC/PV. 363, 8 Feb. 1968, para. 17. See also ENDC/PV. 304, 13 June 1967, para. 13 (Mexico). The representative of the latter country referred precisely to the first review conference.

<sup>93</sup> ENDC/PV. 337, 10 Oct. 1967, para. 20.

<sup>94</sup> DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 16 (ENDC/201, 31 Oct. 1967), para. 9.

<sup>95</sup> Ibid., Sec. 17 (ENDC/201/Rev. 2, 13 Feb. 1968), para. 7.

<sup>96</sup> ENDC/PV. 369, 22 Feb. 1968, para. 18 (Poland) and para. 65 (US).

(b) That the failure by a State or group of States to adhere to the Treaty jeopardizes the existing or potential balance of power in its area, thereby threatening its security;

(c) That any other extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country."<sup>97</sup>

The Nigerian proposal had no better chance than the Brazilian one. The only comments on the proposal were made by the Canadian representative at the ENDC who feared that the first ground mentioned above would be open to variable interpretations and would not therefore enhance the stability of the treaty. As to the second ground, it was thought that any State that had signed the treaty might delay ratification thereof if it perceived a threat through the non-adherence of some other State or States.<sup>98</sup>

Nigeria later dropped its proposal in favour of a set of amendments to Article X of the joint treaty draft of 11 March 1968. According to these amendments, grounds for withdrawal were not only the "extraordinary events" but also other "important international developments" which "have jeopardized, or are likely to jeopardize, the national interests" of the country.<sup>99</sup> (Emphasis added.) These amendments, which were submitted to the ENDC just before its adjournment on 14 March 1968, were hardly referred to in the debates of the UN General Assembly in April-June 1968,<sup>100</sup> debates which led to the final formulation of the NPT.

97 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 18 (ENDC/202, 2 Nov. 1967). See also ENDC/PV. 344, 2 Nov. 1967, para. 15.

98 ENDC/PV. 346, 9 Nov. 1967, para. 10. The Nigerian representative while holding to the ground set forth in subparagraph (a) above, explained that the need for the second ground set forth in subparagraph (b) would depend on the substance of whatever article was agreed on to provide security for non-nuclear Powers against nuclear threat or attack. ENDC/PV. 351, 28 Nov. 1967, para. 15.

99 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 37 (ENDC/220/Rev. 1, 14 Mar. 1968). See also ENDC/PV. 371, 28 Feb. 1968, para. 21 (Nigeria) and ENDC/PV. 378, 13 Mar. 1968, para. 18 (US).

100 See A/C.1/PV. 1570 (prov.), 17 May 1968, p. 27 (Tanzania).



The above interpretations and proposals indicate that the withdrawal from the NPT would be a highly controversial issue. Moreover, it has been pointed out that it is hard to imagine that a decision to terminate, for example, the NPT would be taken strictly on the basis of considerations affecting the subject matter of the Treaty itself. A decision to end such an agreement, it was argued, would require a far-reaching realignment of the country's foreign policy stance.<sup>101</sup> Against this background, procedures for withdrawal under the NPT appear to be of paramount importance.

### 3. Procedures for Withdrawal

The second part of Article X.1 stipulates that the Party to the Treaty "shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests."

These provisions differ from those of the Partial Test-Ban Treaty in that they prescribe two important additions. According to Article IV of the latter a Party will have to give notice of its decision to withdraw only to the other Parties, whereas under the provisions of Article X of the NPT, it will also have to give notice to the UN Security Council, a notice which will have to include a statement of the extraordinary events. As explained by the US representative at the ENDC, when he first introduced the first version of the withdrawal clause in the first American treaty draft of 1965, "(t)hese requirements have been added because they provide an additional brake on hasty withdrawal action without limiting the basic right of withdrawal. In addition, Security Council notification and explanation are clearly appropriate in view of the serious security ramifications of withdrawal."<sup>102</sup> In a

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<sup>101</sup> Abram Chayes, "An Inquiry into the Workings of Arms Control Agreements", Harvard Law Review, Vol. 85, No. 5, Mar. 1972, p. 963.

<sup>102</sup> ENDC/PV. 224, 17 Aug. 1965, p. 20.

later statement the same year, the US representative further explained that these requirements would also afford an opportunity for consultations to avoid the withdrawal, and would provide an explicit role for the United Nations.<sup>103</sup>

The withdrawal requirements under the NPT appear to have been introduced in the same spirit as those included in the previously mentioned UK-US draft treaty on the test ban, which was negotiated at Moscow in the summer of 1963. The latter prescribed the convening of a conference which was to examine a statement by the withdrawing State containing the reasons on which the determination to withdraw was based.<sup>104</sup> The conference was a possible forum for discussing violations of the treaty and as an instrument for mobilising political pressure.<sup>105</sup>

The procedural requirements under the NPT for withdrawal should now be closely examined. The first requirement is to give a notice of withdrawal to all the Parties to the Treaty. This requirement which has been well established under the Test-Ban Treaty was questioned by only one country, Brazil. It proposed to give notice only to the Depositary Governments.<sup>106</sup>

The second requirement is to give a notice of withdrawal to the Security Council. Brazil was also the only country to have objected to this requirement. The representative of Brazil explained that "the Charter of the United Nations entrusts the Security Council with functions specifically related to the maintenance of world peace and security and not with those of participating in the mechanism of withdrawal from any treaty. Moreover, among the members of the Security Council

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<sup>103</sup> GAOR, 20th Sess., 1st Cttee, 1366th mtg, 27 Oct. 1965, para. 18.

<sup>104</sup> See ENDC/58, 27 Aug. 1962, Article III.

<sup>105</sup> Jacobson and Stein, op. cit., p. 458.

<sup>106</sup> See DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 16 (ENDC/201, 31 Oct. 1967), para. 9 and Sec. 17 (ENDC/201/Rev. 2, 13 Feb. 1968), para. 7.

there may be some which will not be parties to the treaty, as will probably be the case with one of the permanent members. A country having decided to withdraw from the treaty might thus be placed, at least theoretically, in the strange situation of stating the reasons justifying its decision before a body composed of States a certain number of which are not parties to the non-proliferation treaty."<sup>107</sup>

The Brazilian stand was strongly criticised by the co-Chairmen of the ENDC. The representative of the United States explained that "the Security Council is not limited under the Charter to considering matters in which all its members are directly involved. ... any non-parties to the treaty would observe some discretion in commenting on the treaty itself; but they have the same right as other members of the Security Council to express their views concerning matters affecting international peace and security."<sup>108</sup> The representative of the Soviet Union in his turn explained that the "observance of a non-proliferation treaty and its effectiveness are bound to be related to the powers of the Security Council, which according to the United Nations Charter, Article 24, has the primary responsibility for the maintenance of international peace and security." He recalled both Article 30 of the Treaty of Tlatelolco, which includes a similar requirement, and Article XII.C of the Statute of the IAEA, which provides for notification of the Security Council in cases of non-compliance.<sup>109</sup>

There is no doubt that withdrawal from a treaty such as the NPT would be of direct concern to the Security Council, which should be given the opportunity to examine the grounds for withdrawal and its possible impact on the viability of the NPT. Since the decision to withdraw might most probably be based on security considerations, as can be implied from the

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<sup>107</sup> ENDC/PV. 363, 8 Feb. 1968, para. 58.

<sup>108</sup> ENDC/PV. 368, 21 Feb. 1968, para. 24.

<sup>109</sup> ENDC/PV. 377, 12 Mar. 1968, paras. 24-31. See also ENDC/PV. 369, 22 Feb. 1968, para. 20 (Poland).

text of Article X and its negotiating history, the Security Council would be a suitable forum for meeting the security preoccupations of the withdrawing Party. Moreover, the possibility that withdrawal might imply or indicate an imminent acquisition of nuclear weapons by the withdrawing State, may bring into play the Security Council resolution 255 on security guarantees.<sup>110</sup> But apart from this resolution, an act of withdrawal by a Party in order to acquire nuclear weapons could be considered a "situation which might lead to international friction" justifying an investigation by the Security Council under Article 34 of the UN Charter. The entire situation might thereafter be characterised as a "threat to the peace" under Article 39, justifying the application of appropriate sanctions under Articles 40, 41 and 42.<sup>111</sup>

The third procedural requirement for withdrawal is to make a statement of the extraordinary events which the withdrawing Party regards as having jeopardized its supreme interests. In this respect, the Romanian delegation at the ENDC submitted a formal amendment to Article VII of the identical treaty drafts of 24 August 1967 to the effect of deleting any reference to such a statement.<sup>112</sup> The amendment was reintroduced to Article X of the identical treaty drafts of 18 January 1968.<sup>113</sup> The Romanians were of the view that the notice of withdrawal from the treaty given to other Parties and to the UN Security Council would suffice. It was considered that the contents of the notice came within the exclusive competence of the Government of the State finding itself in such a situation.<sup>114</sup> Moreover, it was noticed that no such statement was required under the provisions of the Partial Test-

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110 See Chapter 8, Part III.

111 Willrich, Non-Proliferation Treaty, p. 301, note 33.

112 DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 14 (ENDC/199, 19 Oct. 1967).

113 Ibid., Sec. 40 (ENDC/223/Rev. 1, 1 Mar. 1968).

114 ENDC/PV. 348, 16 Nov. 1967, para. 24. See also ENDC/PV. 376, 11 Mar. 1968, para. 23.

Ban Treaty, the Treaty on Outer Space and the Treaty of Tlatelolco.<sup>115</sup>

The co-Chairmen had tried to explain the significance of such a statement in the context of the NPT. The US representative at the ENDC explained that since withdrawal would be a step of such vital importance, other parties to the treaty would have a strong and legitimate interest in knowing why such action was being taken.<sup>116</sup> The Soviet representative explained in his turn that "other parties to this treaty must receive an explanation of the reasons for withdrawal from the treaty, not from any other source, but from the State itself that withdraws from the treaty." He wondered "(w)ho could explain better than the State concerned the reasons and events which have compelled it to withdraw from the treaty?" Moreover, the statement was considered as an element of restraint, "since a State intending to withdraw from the treaty will have to ponder, before taking such a step, how it will be regarded by world public opinion."<sup>117</sup>

These considerations were quite convincing. With the exception of Brazil, the Romanian amendment had hardly received any support.<sup>118</sup>

The last procedural requirement for withdrawal is that the withdrawal notice should be given three months in advance. This period of time is similar to the one established by the Partial Test-Ban Treaty. Under the NPT, the period of three months was considered a reasonable period.<sup>119</sup>

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115 ENDC/PV. 362, 6 Feb. 1968, para. 6.

116 ENDC/PV. 368, 21 Feb. 1968, para. 23. See also a similar statement made by the Canadian representative in ENDC/PV. 345, 6 Nov. 1967, para. 36.

117 ENDC/PV. 377, 12 Mar. 1968, paras. 34-35.

118 At the UN General Assembly, Cuba considered that it was a coercion on the exercise of the sovereignty of States to force them to explain their decisions. A/C.1/PV. 1566 (prov.), 13 May 1968, pp. 59-60.

119 Hearings on NPT, 1969, pp. 368-369 (Adrian Fisher).

#### 4. The Nature of the Withdrawal Clause

Since each State Party to the NPT will have the right to decide for itself the extraordinary events, related to the subject matter of the Treaty, which have jeopardized its supreme interests, there will, in fact, be no boundaries for a State withdrawing in bad faith, except the reactions of the other Parties to the Treaty and the consideration by the Security Council of the grounds invoked for withdrawing. Apart from this permissive nature of the withdrawal clause, wanted and agreed upon by the Parties to the Treaty, can it be said that the clause is a version of rebus sic stantibus, or what has come to be called "fundamental change of circumstances"?<sup>120</sup> Can it also be said that since there is no expressly written sanction in the Treaty the clause is a sort of a sanction against any contravention?

With regard to the first question, the invocation of a fundamental change of circumstances does not arise in the case of the NPT, since the Treaty already contains a clause permitting a Party to withdraw upon a three-month notice if certain events occur. As pointed out by the International Law Commission in its commentary on Article 59 of the "Draft Articles on the Law of Treaties" adopted at its 18th session in 1966, the fundamental change rule would "for obvious reasons ... seldom or never have relevance for treaties of limited duration or which are terminable upon notice."<sup>121</sup>

With regard to the second question, it has already been demonstrated that the violation of the NPT could be invoked as a ground for withdrawal. It is in this sense that it could be said that the withdrawal clause is a sort of a sanction against contravention. However, since the violation of the Treaty can be invoked as an independent ground for the suspension or termination of the Treaty under the general prin-

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<sup>120</sup> Abram Chayes, loc. cit., p. 958.

<sup>121</sup> See United Nations Conference on the Law of Treaties, op. cit., p. 78, para. 8. Article 59 became Article 62 in the final text adopted by the Conference. Ibid., p. 297.

ciples of the law of treaties, why should a Party resort to the withdrawal clause? The clause appears to be offering two advantages. In the first place, the withdrawing Party would avoid in the future the requirements and the elaborate procedures worked out by the Vienna Convention on the Law of Treaties for the termination or suspension of the operation of a treaty as a consequence of its breach.<sup>122</sup> Secondly, since the decision to invoke the withdrawal clause would bring into play the Security Council, the withdrawing Party may resort to the clause as a means of exerting pressure on the Council to redress immediately the situation resulting from the treaty's violation. In this respect, the withdrawal clause could be considered as a safety valve.

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To sum up, the adaptability of the Treaty to changing circumstances is being assured through an initial limited duration of twenty-five years, amendments, review conferences and the withdrawal clause. Except for the few objections made in the course of this chapter, the provisions of Articles VIII and X are generally acceptable and raise no serious problems. However, it should be pointed out once more that depriving the Review Conference of the right to introduce or at least examine seriously amendments to the NPT has certainly weakened the role of the Conference as a vehicle towards the further promotion of the objective of the non-proliferation of nuclear weapons.

<sup>122</sup> See Articles 60 and 65 of the Vienna Convention in ibid., pp. 297-298. The Convention has not yet entered into force.





## PART VI

*"Nothing in the treaty should adversely affect the right of any group of States to conclude regional treaties in order to ensure the total absence of nuclear weapons in their territories"*

(Principle (e))



## CHAPTER 13

### Nuclear-Weapon-Free Zones : Article VII

Text :

#### Article VII

Nothing in this Treaty affects the right of any group of States to conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories.

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The idea of an article in the NPT on the right of States to establish nuclear-weapon-free zones originated at the same time with the idea of principle (e) at the 20th session of the UN General Assembly when the five principles of the General Assembly resolution 2028(XX) were being formulated.<sup>1</sup> Both ideas were advanced by Mexico, which had continued at the ENDC to claim the inclusion of an article in the text of the NPT.<sup>2</sup> Its claim had become more pressing after the conclusion of the Treaty of Tlatelolco, which was opened for signature on 14 February 1967.<sup>3</sup>

Accordingly, the first identical treaty drafts of 24 August 1967 included a last preambular paragraph the phraseology of which was almost identical to that of principle (e).<sup>4</sup>

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<sup>1</sup> See Chapter 2.

<sup>2</sup> ENDC/PV. 274, 19 July 1966, p. 16.

<sup>3</sup> ENDC/PV. 295, 21 Mar. 1967.

<sup>4</sup> See Appendix 3-D.

Upon Mexico's insistence for the transfer of the principle from the preamble to the body of the treaty and even its presentation of a concrete text of a draft article to that effect,<sup>5</sup> Article VII was introduced for the first time in the identical treaty drafts of 18 January 1968. It was identical to the text proposed by Mexico and remained unchanged until the final formulation of the NPT, in spite of two proposals submitted by two Latin American countries.

The first proposal was submitted at the ENDC by Brazil. Article VII was proposed to be amended as follows:

"Nothing in this Treaty affects or shall be interpreted as affecting, in any way, the rights or obligations of signatory States under regional Treaties on the proscription of nuclear weapons or the rights of any group of States to conclude regional Treaties, consistent with the objectives of this Treaty."<sup>6</sup>

The Brazilian representative explained that "(i)t would ... be much more satisfactory ... if the draft specifically recognized the rights and obligations entered into by nations which have already concluded regional treaties of that kind."<sup>7</sup> The Brazilian delegation appeared to have been mainly motivated by its stand on "peaceful nuclear explosions", which it claimed to have the right to carry out under the provisions of the Treaty of Tlatelolco.<sup>8</sup>

The representative of the United States saw no need for the Brazilian amendment, since Article VII already properly recognised the right of States to conclude regional treaties on the proscription of nuclear weapons. He pointed out that "the obligations undertaken in other treaties which are consistent with those under the present treaty would not be

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5 ENDC/PV. 331, 19 Sept. 1967, paras. 15-16 and DCOR, Suppl. for 1967 and 1968, Docs. DC/230 and Add. 1, Ann. IV, Sec. 12 (ENDC/196, 19 Sept. 1967), Article IV-B.

6 Ibid., Sec. 17 (ENDC/201/Rev. 2, 13 Feb. 1968), para. 5.

7 ENDC/PV. 363, 8 Feb. 1968, para. 49.

8 See Ibid., para. 50.

affected by this treaty." It was feared that the amendment could create confusion.<sup>9</sup>

The second proposal was put forward at the UN General Assembly by the delegation of Guyana. It felt that there should be added to Article VII the provision that regional treaties should discriminate in no way against any State situated within the region defined.<sup>10</sup> This proposal was prompted by the fact that Guyana had not been able to accede to the Treaty of Tlatelolco as a result of paragraph 2 of Article 25 of the Treaty which stipulates that:

"The General Conference shall not take any decision regarding the admission of a political entity part or all of whose territory is the subject, prior to the date when this Treaty is opened for signature, of a dispute or claim between an extra-continental country and one or more Latin American States, so long as the dispute has not been settled by peaceful means."

Guyana has, in fact, a frontier dispute with Venezuela, a dispute which was inherited from the United Kingdom which was internationally responsible for the territories of Guyana when the Treaty of Tlatelolco was being negotiated.<sup>11</sup>

At the Conference of Non-Nuclear-Weapon States which was held in Geneva shortly after the NPT was opened for signature on 1 July 1968, a resolution was adopted recommending all non-nuclear-weapon States not comprised in the zone established by the Treaty of Tlatelolco "to initiate or continue such studies as they may deem opportune concerning the possibility and desirability of establishing by treaty the military

9 ENDC/PV. 369, 27 Feb. 1968, para. 61. The US representative left the impression that the NPT would prevail if a regional nuclear-weapon-free zone were to be inconsistent with its provisions. It would be quite relevant to refer here to the provisions of the Vienna Convention on the Law of Treaties with regard to the application of successive treaties relating to the same subject-matter. See UN Doc. A/CONF. 39/27, Article 30 in United Nations Conference on the Law of Treaties, op. cit., p. 293

10 A/C.1/PV. 1573, 23 May 1968, para. 125.

11 See the response of the representative of Venezuela to the statement of the representative of Guyana in Ibid., paras. 130-132.

denuclearization of their respective zones, provided that political and security conditions permit."<sup>12</sup>

The establishment of other nuclear-weapon-free zones has been discussed in and outside of the United Nations and with respect to many areas including Central Europe, the Nordic countries, the Mediterranean, the Balkans, the Middle East, South Asia, the Far East and the Pacific, Africa, Antarctica, and even outer space, the sea-bed and the ocean floor. It is not intended here to dwell on the efforts exerted to establish nuclear-weapon-free zones in these areas.<sup>13</sup> After all, efforts relating to several of these regions or environments have already been dwelt on or referred to throughout this study. What is of relevance in this part are the lessons to be drawn from a concrete and a fruitful outcome of a Latin American experience. The interest that the Treaty of Tlatelolco had aroused with regard to the establishment of nuclear-weapon-free zones was certainly responsible for the comprehensive study carried out by the CCD in 1975 of this question in all its aspects.

In a first section we shall dwell on the formulation and the basic characteristics of the Treaty of Tlatelolco, as well as highlight the stage reached in its implementation and more particularly the role of OPANAL. Secondly, the comprehensive study on nuclear-weapon-free zones will be briefly outlined.

## I. The Treaty of Tlatelolco

### 1. Formulation and Characteristics

The Treaty of Tlatelolco applies to the only denuclearized zone in the world including a densely populated area (more than 8 million square kilometres and a population of approximately 150 million). No other similar international

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<sup>12</sup> Final Document of the Conference of Non-Nuclear-Weapon States (A/CONF. 35/10, 1 Oct. 1968), Resolution B.A., pp. 6-7. The draft was submitted by 16 Latin American States. A/CONF. 35/C.1/L.5/Rev. 1, 18 Sept. 1968.

<sup>13</sup> For a succinct treatment, see Nuclear-Weapon-Free Zones (New York: United Nations, 1977).

instrument, such as The Antarctic Treaty or the Sea-bed Treaty, is relevant to other densely populated areas, such as Africa or the Middle East. Without overlooking the special political and security conditions of each area, the Treaty of Tlatelolco can serve as a basic model for present and future endeavours for denuclearization. The Treaty is instructive not only with regard to its contents but also with regard to the steps taken and the methods adopted for its formulation.

With regard to the main steps taken,<sup>14</sup> it should be recalled that on 29 April 1963, the Presidents of Bolivia, Brazil, Chile, Ecuador and Mexico issued a joint declaration announcing that "their Governments are prepared to sign a multilateral Latin American agreement whereby their countries would undertake not to manufacture, receive, store or test nuclear weapons or nuclear launching devices..." The United Nations General Assembly at its 18th session in 1963 adopted a resolution approving the idea.<sup>15</sup>

Immediately after the close of the 18th session of the Assembly the Mexican Ministry of Foreign Affairs commenced active consultations with the foreign ministries of the other Latin-American Republics on the best means of carrying out studies and taking the necessary measures to attain the objects of that declaration. The result of those consultations was the Preliminary Meeting on the Denuclearization of Latin America held in San Jeronimo Lidice, on the outskirts of the Federal District of Mexico, from 23 to 27 November 1964. Two basic resolutions were adopted there. The first defined the term "denuclearization", stating that it was to cover only the absence of nuclear weapons and not prohibition of the

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<sup>14</sup> See the statement made by Ambassador Alfonso Garcia Robles, the representative of Mexico at the ENDC, just one week after the Treaty of Tlatelolco had been opened for signature in ENDC/PV. 287, 21 Feb. 1967, paras.

50-58. See also Garcia Robles, The Denuclearization of Latin America, *op. cit.* and "Mesures de désarmement dans des zones particulières: le traité visant l'interdiction des armes nucléaires en Amérique Latine", pp. 60-70.

<sup>15</sup> See Chapter 2.

peaceful use of the atom, which on the contrary was to be encouraged, particularly for the benefit of the developing countries. The second resolution set up the Preparatory Commission for the Denuclearization of Latin America (COPREDAL).<sup>16</sup> The Preparatory Commission was recommended to give priority in its work to the following matters:

"(a) the definition of the geographical boundaries of the area to which the treaty should apply;

(b) the methods of verification, inspection and control that should be adopted to ensure the faithful fulfilment of the obligations contracted under the treaty;

(c) action designed to secure the collaboration in the Commission's work of the Latin American Republics that were not represented at the Preliminary Meeting;

(d) action designed to ensure that the extra-continental or continental States which, in addition to the Latin American Republics, exercise de jure or de facto international responsibility for territories situated within the boundaries of the geographical area to which the treaty applies, agree to contract the same obligations with regard to those territories as the above-mentioned Republics contract with regard to their own;

(e) action designed to obtain from the nuclear Powers a commitment to the effect that they will strictly respect the legal instrument on the denuclearization of Latin America, as regards all its aspects and consequences."<sup>17</sup>

Four months later the first session of the Preparatory Commission was inaugurated on 15 March 1965. A Co-ordinating Committee and three Working Groups were set up. The three Working Groups were designated by the first three letters of the alphabet and given clearly-defined and urgent terms of reference. Each Working Group was composed of six members. Group A, which had its headquarters at the United Nations Headquarters in New York, was responsible for considering the

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<sup>16</sup> Garcia Robles in ENDC/PV. 287, 21 Feb. 1967, para. 51.

<sup>17</sup> See the Final Act of the Preliminary Meeting on the Denuclearization of Latin America in UN Doc. A/5824, 3 Dec. 1964, pp. 6-7.



items (a), (c) and (d) mentioned above in the resolution of the Preliminary Meeting on the Denuclearization of Latin America. Group B, which had its headquarters at Mexico City, was responsible for the consideration of item (b) relating to the question of control. As to Group C, which had also its headquarters as Group A in New York, it was responsible for the implementation of item (e) relating to the commitment of the nuclear Powers to the legal instrument on denuclearization. The Co-ordinating Committee was mainly responsible for the co-ordination of the work of the three Working Groups and the consideration of material received from these Groups or prepared or compiled by the Committee itself for subsequent use in the formulation of the preliminary draft of the treaty.<sup>18</sup>

The three Groups worked between the first and the second sessions, and when the second session started on 23 August 1965 the Committee had before it several reports from them. The report of Working Group B contained a preliminary draft of articles on verification, inspection and control, for the preparation of which an extensive collection of background material supplied by the Secretary-General of the United Nations had been available, together with technical advice from the Chief of the Disarmament Affairs Division of that Organization.

The Committee at its second session considered this preliminary draft, transmitted it to the Governments, and approved a general declaration of principle which later, with slight amendments, became the Preamble of the Treaty. It also set up a Negotiating Committee, the chief duty of which was to obtain undertakings from the nuclear Powers to respect the legal status of the military denuclearization of Latin America which was to be embodied in that international instrument.<sup>19</sup> The Negotiating Committee was composed of the Chairman of the Preparatory Commission and the Chairmen of Working

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18 Garcia Robles, The Denuclearization of Latin America, pp. 82-84

19 Garcia Robles in ENDC/PV. 287, 21 Feb. 1967, paras. 52-53.

Groups A and C. In practice the Negotiating Committee replaced these two Groups.<sup>20</sup>

The interval between the second and the third sessions was the longest recess between meetings of the Preparatory Commission; but the seven and a half months which passed without a meeting of the Committee were far from wasted. During much of this time either the Negotiating Committee or the Co-ordinating Committee worked assiduously. The former submitted to the Preparatory Commission a detailed report on the results of its negotiations with the representatives of the nuclear States during the 20th session of the General Assembly of the United Nations. The result of the Co-ordinating Committee's efforts was a substantial working paper in the form of a draft treaty. Thus the Commission at its third session inaugurated on 19 April 1966 had before it for the first time a text enabling it to assess fully the different questions on which it would have to decide its position before it finished drafting the denuclearization treaty.<sup>21</sup>

By the fourth session of the Preparatory Commission the number of observers for States had risen to 22, more than the members of the Committee (at the first session there were only two observers, the Netherlands and Yugoslavia). They came from countries in four continents: Austria, Belgium, Canada, the Republic of China, Denmark, Finland, France, the Federal Republic of Germany, Ghana, India, Israel, Italy, Japan, Netherlands, Norway, Poland, Romania, Sweden, the United Arab Republic, the United Kingdom, the United States of America and Yugoslavia. The session was divided into two parts, the first being devoted to debate on the motion for adjournment submitted by various delegations. At the single meeting comprising this first part, held on 30 August 1966, the Commission had before it the Negotiating Committee's

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20 Garcia Robles, "Mesures de désarmement dans des zones particulières: le traité visant l'interdiction des armes nucléaires en Amérique Latine", p. 63.

21 See Garcia Robles in ENDC/PV. 287, 21 Feb. 1967, para. 54.

second report, on the results of the informal steps it had been instructed to take in order to establish contact with the Government of the People's Republic of China. The second part, held from 31 January to 14 February 1967, culminated in the approval and opening for signature of the Treaty for the Prohibition of Nuclear Weapons in Latin America.<sup>22</sup>

At the end of 1966 the Commission's Co-ordinating Committee, founding itself on the results of informal talks held during the twenty-first session of the United Nations General Assembly, drafted in New York a number of concrete suggestions, which were embodied in its report of 28 December 1966, for solving the problems left in abeyance at the third session. The main problem concerned the entry into force of the treaty. With a sense of reality the Committee pointed out in its report that the second part of the fourth session, which was due to open on 31 January 1967, seemed to offer Latin America its final chance of giving the world the first example of a treaty of a kind which had been under preparation for the previous three years. Accordingly, it recommended the Commission, so as not to let slip this last opportunity, to remain in session until the treaty for the denuclearization of Latin America could be concluded and opened for signature.<sup>23</sup>

The Preparatory Commission took the recommendations of its Co-ordinating Committee very seriously. At the opening meeting of the second part of its fourth session it decided to dispense with the general discussion and established two working groups. These groups completed the text of the Treaty, which was unanimously approved on 12 February and opened for signature two days later at the closing meeting of the Commission's work.<sup>24</sup>

Turning to the contents of the Treaty of Tlatelolco, it should be recalled that throughout the present study of the NPT comparative analyses were made between the main provisions

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22 Ibid., para. 56.

23 Ibid., para. 57.

24 Ibid., para. 58.

of the two instruments. Moreover, additional Protocols I and II of the Treaty of Tlatelolco have been dealt with in the context of Chapter 8 on security guarantees. It would therefore suffice under the present chapter to summarise the salient differences between the two Treaties, which would also help to demonstrate the advantages that could be obtained through the establishment of nuclear-weapon-free zones.

In the first place, the obligations under Article 1 of the Treaty of Tlatelolco are broader in scope than those of Articles I and II of the NPT. The former Treaty prohibits the storage, installations and deployment of nuclear weapons on the territories of the Contracting Parties, whereas under the NPT nuclear-weapon States can continue to store, install and deploy nuclear weapons on the territories of non-nuclear-weapon States Party to the Treaty. Moreover, under Article 1 of the Treaty of Tlatelolco each Contracting Party is under the obligation to use exclusively for peaceful purposes the nuclear material and facilities which are under its jurisdiction, whereas under the NPT there is nothing to prevent a non-nuclear-weapon State Party from using nuclear material for military purposes other than the production of nuclear weapons or other nuclear explosive devices, such as for submarine propulsion.

With regard to international safeguards, Article 16 of the Treaty of Tlatelolco allows for special inspections if a Contracting Party suspects that some activity prohibited by the Treaty has been carried out or is about to be carried out, either in the territory of any other Party or in any other place on such latter Party's behalf. Under Article III of the NPT as well as under the safeguards procedures worked out by the IAEA for applying safeguards to the Parties to the Treaty, inspection is limited only to the nuclear activities declared by the Party.

On the issue of nuclear guarantees, the Parties to the Treaty of Tlatelolco benefit from a negative guarantee, i.e., the undertaking by the nuclear-weapon States not to use or threaten to use nuclear weapons against them. This was an

achievement which was not possible to realise on a universal level under the NPT.

Under the Treaty of Tlatelolco, the "Agency for the Prohibition of Nuclear Weapons in Latin America" (OPANAL) would keep under constant review the operation of the Treaty and ensure compliance with its obligations, whereas under the NPT, periodic review conferences may be held only every five years.

The Treaty of Tlatelolco is of a permanent nature and shall remain in force indefinitely, whereas the NPT has an initial duration of twenty-five years. Both Treaties provide for a withdrawal clause, which is more elaborate but less precise in the Latin American Treaty.

The latter expressly forbids reservations in its Article 27. The lack of a similar provision under the NPT has, in fact, encouraged an abundance of interpretations.

Finally, under Article 24 of the Treaty of Tlatelolco any question or dispute concerning the interpretation or application of the Treaty which is not settled shall be referred to the International Court of Justice with the prior consent of the Parties to the controversy. Although the NPT does not provide for a similar provision, the safeguards agreements concluded between the Parties to the Treaty and the IAEA include provisions on the settlement of disputes.

## 2. OPANAL<sup>25</sup>

The Treaty of Tlatelolco which was opened for signature on 14 February 1967 entered into force on 25 April 1969, when article 28, paragraph 3, had taken effect, after 11 ratifica-

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25 The following is based on the OPANAL memorandum prepared in response to the request of the Preparatory Committee of the Second NPT Review Conference in Doc. NPT/CONF.II/PC.II/10, 1 Aug. 1979; and Hector Gros Espiell, "The Tlatelolco Treaty: Present Situation and Future Prospects," IAEA Bulletin, Vol. 20, No. 5, Oct. 1978, pp. 25-34.

tions with waiver had been received. As of mid-1979 22 Latin American States are Parties to the Treaty.<sup>26</sup>

The Additional Protocols I and II of the Treaty entered into force, for the States which ratified them on the dates of the respective ratifications. Additional Protocol I has so far been signed and ratified by the Netherlands and the United Kingdom. Another two States having international responsibility for territories situated in the zone of application of the Treaty, namely France and the United States, have already signed it but have not yet ratified it. When France ratifies the Protocol, French Guiana, Martinique and Guadeloupe will become militarily denuclearized. After the ratification the United States, the Virgin Islands, for example, will be free of nuclear weapons. The Panama Canal Treaty, signed by Panama and the United States in September 1977, which has already been ratified by both parties, establishes mandatory military denuclearization of the territory formerly known as the Canal Zone.

As to Additional Protocol II - it had been signed and ratified by the five nuclear-weapon States. In other words, all States which have acknowledged that they possess nuclear weapons are already Parties to Additional Protocol II.

OPANAL's General Conference, in which all the States Parties to the Treaty of Tlatelolco are represented, had already held six regular sessions and two special sessions. The Council, composed of representatives of five States

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26 The States Parties are: Bahamas, Barbados, Bolivia, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay and Venezuela. Of the other States situated within the zone of application of the Treaty, Brazil and Chile have signed and ratified it but have not waived the requirements for entry into force as prescribed in Article 28. Argentina has signed it but has not ratified it, and Cuba and Guyana have not yet signed it, the latter for reasons explained above.

Parties, which is geared to meet continuously at OPANAL's headquarters in Mexico City, meets at intervals, usually of two months. As to the Secretariat, it is responsible for co-ordinating the work of the Conference and the Council, for liaison, and for the distribution and exchange of information among the Member States.

Moreover, a Good Offices Committee was set up in 1970 and composed now of three Member States. It is engaged in negotiating accession to the Treaty of Tlatelolco and helping to settle any disputes arising between States with regard to the Treaty, such as the dispute preventing Guyana from acceding to the Treaty. In this regard, the Secretariat, for its part, has offered and is supplying co-operation and advice to the States concerned in order to facilitate their accession and to negotiate the relevant agreements with the IAEA for the application of safeguards.

In accordance with Article 13 of the Treaty of Tlatelolco, 17 States parties to the Treaty have concluded safeguards agreements with the IAEA in the light of both the Treaty of Tlatelolco and the NPT.<sup>27</sup> In the case of Panama, however, some doubts arose as to whether IAEA could conclude with that State, which at the time when the question was being discussed was not a Party to the NPT, an agreement similar to those it concludes with States which are Parties to that Treaty. In other words, doubt was expressed as to whether a State not a Party to the NPT was entitled to claim the application of IAEA safeguards, even where it had formally and solemnly renounced nuclear weapons by means of another instrument, in this case the Treaty of Tlatelolco.

The expression of such doubts could have had extremely complex and dangerous consequences. Fortunately, these dif-

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27 These States are Bolivia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Paraguay, Peru, Suriname, Uruguay, Venezuela and the Netherlands (Netherlands Antilles).

difficulties were overcome and the Panama Agreement was signed on 14 February 1977, only the Treaty of Tlatelolco being invoked. Panama then became a Party to NPT. Colombia subsequently negotiated its agreement on the basis of the Treaty of Tlatelolco, since it is not a Party to the NPT. This agreement was expected to be signed soon. All the others were negotiated and concluded under the NPT and the Treaty of Tlatelolco.

When Chile, Brazil and Argentina become Parties to the Treaty of Tlatelolco, without being Parties to NPT, they will also have to negotiate and conclude safeguard agreements only on the basis of Article 13 of the Treaty for the Prohibition of Nuclear Weapons in Latin America.

Moreover, in accordance with Article 14, the semi-annual reports by the Governments stating that no activity prohibited under the Treaty has occurred in their territories are regularly submitted and every 60 days the OPANAL Council analyses these reports and the compliance with this provision of the Treaty.

As to the other provisions of the control system relating to special reports and special inspections (Articles 15 and 16 respectively), there has been no need for their application. However, the relevant legal instruments are ready to be used should the occasion arise. The provisions relating to measures which may be taken in the event of Treaty violations (Article 20) also have not yet been put into effect since no violations of the specified type have occurred.

With regard to the peaceful uses of nuclear energy, all Latin American States, whether or not Parties to the NPT, have on various occasions expressed or endorsed the view that if the spirit of Article IV and V of the NPT is to be maintained, nuclear-weapon States must extend to those which have renounced the acquisition of nuclear-weapons, where possible and reasonable, the benefits of any application of nuclear energy including the use of explosive devices. The United States shared this view at the sixth regular session.



of the General Conference of OPANAL held at Quito, Ecuador in April 1979.

Two years earlier, a Special Session of the General Conference of OPANAL meeting in February 1977 stated in its declaration that OPANAL should combine the responsibility it bears for matters of disarmament with the functions and powers necessary for it to become the international organization which, at the regional level, will plan, systematize, arrange and co-ordinate Latin American efforts in the direction of full and effective peaceful uses of nuclear energy.

At the Fifth regional session convened in Caracas, Venezuela in April 1977, the General Conference requested the General Secretary of OPANAL to prepare, in consultation with the IAEA, the Inter-American Nuclear Energy Commission (CIEN) and other organizations, a report in which specific measures are proposed for initiating a programme of co-operation in the peaceful uses of nuclear energy. The report was to be compiled on the basis of the replies received from Latin American Governments to the questionnaire sent out by the General Secretary, in consultation with the IAEA and the Latin American Energy Organization (OLADE).

On the basis of the report which was presented by the General Secretary of OPANAL to the Sixth regular session of the General Conference held in April 1979, the Conference requested the General Secretary to seek answers from those States which had not yet responded to his questionnaire. In order to assess the needs of the Member States, the General Secretary was also requested to seek the advice of the IAEA and the UNDP and to submit a report to the Member States not later than July 1980.

In anticipation of the Second NPT Review Conference, the General Conference of OPANAL in its 1979 session recommended to the States Parties to the Treaty of Tlatelolco that they should co-ordinate, by such ways and means as they deem appropriate, the positions they will adopt at the Review Conference.

## II. The Comprehensive Study of the Question of Nuclear-Weapon-Free Zones in All Its Aspects<sup>28</sup>

Upon the initiative of Finland, the UN General Assembly at its 29th session in 1974 called for a comprehensive study of the question of nuclear-weapon-free zones in all its aspects by a group of governmental experts under the auspices of the CCD.<sup>29</sup>

In presenting its proposal, Finland stressed the idea of nuclear-weapon-free zones as an independent method to achieve the same ends sought by the NPT, without depriving the latter of its central role in the prevention of the proliferation of nuclear weapons. Finland further held the view that a comprehensive study of such zones, covering all the main aspects of the question, including the characteristics, conditions and criteria of their establishment, would clarify the concept and provide assistance and guidance for any group of countries desiring to establish such a zone.<sup>30</sup>

The CCD in its 1975 session reached a consensus that the group of experts should be composed of 21 members, including 16 from the CCD and five additional members.<sup>31</sup> After an initial meeting in April to outline its work, the Ad hoc Group of Qualified Experts for the Study of Nuclear-Weapon-Free Zones held a series of meetings between 23 June and 18 August 1975. On the latter date, the Group submitted its study to the CCD.

In its carefully worded conclusions, the Group had the following to say:

"In endeavouring to fulfil the task entrusted to it by the General Assembly, the Group of Experts has attempted to elaborate the concept of nuclear-weapon-free zones, identify

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28 UN Doc. A/10027/Add. 1.

29 GA Res. 3261 F (XXIX).

30 The United Nations and Disarmament 1970-1975, p. 110.

31 For the list of members see UN Doc. A/10027/Add. 1, p. 56-60.

the principal issues involved in such zones and analyse their implications both for zonal and extrazonal States. The study does not attempt to establish any precise rules, as it is the considered view of the experts that circumstances in different regions vary so widely that a pragmatic and flexible approach would need to be adopted in each case. Nevertheless, the experts have indicated certain guidelines that could be taken into account where such zones could be created. These guidelines, as well as issues on which the attitudes of Governments are divergent, have been identified for further examination by Governments and by the General Assembly at its thirtieth session."<sup>32</sup>

In a nutshell, basic issues dwelt on by the Group are the concept of nuclear-weapon-free zones, responsibilities of States within the zone and other States, verification and control, the zones and international law and the issue of peaceful uses of nuclear energy.<sup>33</sup>

In noting the various objectives of nuclear-weapon-free zones, the study stated that the premise upon which any zone must be based "will be the conviction of States that their vital security interests would be enhanced and not jeopardized by participation".

Although the study cautioned that it was not possible or realistic to set out precise guidelines for the creation of denuclearized zones--since conditions varied from region to region and it was for Governments themselves to decide their own security requirements--where appropriate conditions did exist, the following principles should be taken into account:

- Obligations relating to the establishment of nuclear-weapon-free zones might be assumed not only by groups of States, including entire continents or large geographical regions, but also by smaller groups of States and even individual countries.

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<sup>32</sup> Ibid., p. 55.

<sup>33</sup> The following is extracted from the excellent summary in the UN publication Nuclear-Weapon-Free Zones, pp. 24-27.

- Zonal arrangements must ensure that the zone would be, and would remain, effectively free of all nuclear weapons.

- The initiative for the creation of a nuclear-weapon-free zone should come from States within the region concerned, and participation must be voluntary.

- Whenever a zone was intended to embrace a region, the participation of all militarily significant States, and preferably all States in that region, would enhance the zone's effectiveness.

- Zone arrangements must contain an effective system of verification to ensure full compliance with agreed obligations.

- The treaty establishing the zone should be of unlimited duration.

Most of the experts also agreed that zone members should not exercise control over nuclear weapons outside the zone. They also stressed the principle that any arrangements for the establishment of a zone must provide for appropriate guarantees by the nuclear-weapon States not to use or threaten to use nuclear weapons against zone members. Finally, most of the experts agreed on the principle that any zonal treaty should provide for the effective prohibition of the development, acquisition, or possession by parties to it of any nuclear explosive device. This prohibition should not, however, preclude access to the potential benefits of peaceful nuclear explosions through international procedures consistent with the Non-Proliferation Treaty and any other international undertakings entered into by the States concerned.

Among the many other questions which arose were: Should the zone include international waters if the security of States parties was thus enhanced? What was the priority commitment of States committed to both a zone treaty and a security alliance? Should States expected to assume obligations towards a zone, especially nuclear-weapon States, be given the opportunity to participate in the zone's establish-

ment? Views differed on these issues although on the question of dual commitments most experts believed that membership of a security alliance could not justify any exceptions to obligations contracted under a zonal agreement.

To avoid serious misunderstandings, the study stressed the need for the definition of such terms as "nuclear weapon", "territory" and "zone". An example of the need for definitions arose when the expert group considered the term "nuclear weapon". Most experts felt that since no distinction could be made between nuclear explosive devices usable for military and for peaceful purposes, the term "nuclear weapon" should apply to any explosive device, whatever its detailed characteristics or intended use. Others, however, saw no incompatibility between "the development of an indigenous peaceful nuclear-explosion capability" and membership of a nuclear-weapon-free zone.

The viability of the nuclear-weapon-free zone, the experts stressed, "will largely depend on an effective system of verification and control". Such a system would generally include: fact-finding machinery, a procedure for consultations between individual States, and a forum for multilateral consultations and recommendations.

The predominant view was that IAEA safeguards should be applied to the complete nuclear fuel cycle in each country within the zone to ensure that any diversion of fissile material would be detected in good time, and thus deterred. Since under its current safeguards procedures IAEA can only verify those nuclear activities that are declared to it, the experts stressed that a zone's verification system should ensure that all nuclear activities were declared.

As to the role of the United Nations, many experts believed that there should be a strong link between a zonal verification and control system and the collective security system of the United Nations. In view of the United Nations' over-all responsibility in disarmament, it was also deemed

appropriate for parties to a zonal treaty to inform the world Organization periodically on the treaty's implementation.

The study briefly examined the question of regional co-operation in nuclear energy pursuits once the nuclear-free zone had been created. Many of the Ad Hoc Group's members recognized, for example, that the establishment of regional fuel cycle centres could satisfy, partly or wholly, the needs of zonal States in developing their nuclear power programmes, while at the same time facilitating physical protection of nuclear materials and application of IAEA safeguards. The creation of the centres would also make it unnecessary for States to develop enrichment and reprocessing facilities of their own. Such centres could also ensure that Member States did not take delivery of enriched uranium or plutonium in excess of their requirements, the study pointed out.

It noted, however, that the whole question of regional fuel cycle centres raised a number of complex issues of sovereignty and jurisdiction and of ownership, management and control, which went beyond the experts' study. Thus it was not possible for the expert group to make precise suggestions at that stage on the functioning of such centres or to offer firm conclusions about their relationship with nuclear-weapon-free zones.

Addressing the question of the relationship between the nuclear-weapon-free zones and international law, the study noted that zones should be effected in accordance with international law and the principles of the United Nations Charter. Their creation should also be consistent with other treaty obligations of the zonal States. The United Nations, it asserted, could play a positive role in the establishment of nuclear-weapon-free zones, using its authority to support the concept and providing the machinery needed for consultations among States members of a zone.

Regarding the peaceful uses of nuclear energy, the study indicated that States parties to a zone had the inalienable right to use nuclear energy for peaceful purposes. Those

States should have the fullest possible access to the benefits of peaceful uses of nuclear energy, including potential benefits of peaceful nuclear explosions; and nuclear-weapon States or other States with highly developed nuclear technology should consider facilitating such access.

The UN General Assembly considered the expert study at its 30th session in 1975 and commended it to the attention of all Governments, IAEA and other concerned international organizations.

At the same time upon the initiative of Mexico the Assembly defined the concept of a nuclear-weapon-free zone as follows:<sup>34</sup>

"A 'nuclear-weapon-free zone' shall, as a general rule, be deemed to be any zone, recognized as such by the United Nations General Assembly, which any group of States, in the free exercise of their sovereignty, has established by virtue of a treaty or convention whereby:

(a) The statute of total absence of nuclear weapons to which the zone shall be subject, including the procedure for the delimitation of the zone, is defined;

(b) An international system of verification and control is established to guarantee compliance with the obligations deriving from that statute."

The Assembly also set out the principal obligations of nuclear-weapon States towards zones and the States they include. It stated that in every case of a nuclear-weapon-free zone recognized as such by the Assembly, all nuclear-weapon States shall undertake or reaffirm, in a solemn international instrument having full legally binding force, such as a treaty, a convention or a protocol, these obligations:

"(a) To respect in all its parts the statute of total absence of nuclear weapons defined in the treaty or convention which serves as the constitutive instrument of the zone;

(b) To refrain from contributing in any way to the performance in the territories forming part

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<sup>34</sup> See GA Res. 3472 B (XXX).

of the zone of acts which involve a violation of the aforesaid treaty or convention;

(c) To refrain from using or threatening to use nuclear weapons against the States included in the zone."

At its 31st session in 1976, the Assembly reiterated its conviction that the establishment of nuclear-weapon-free zones could contribute to the security of zone members, to the prevention of the proliferation of nuclear weapons, and to the goals of general and complete disarmament.

Ever since this latter session, attention was rather focused on the specific proposals for the creation of nuclear-weapon-free zones in different regions of the world. The 1975 study remains as a landmark for all those aspiring for nuclear-weapon-free zones of their own.

\* \* \* \* \*

To sum up, the inclusion of a separate article in the NPT on the right to establish nuclear-weapon-free zones was a pertinent and commendable decision to make. The NPT itself needs to be bolstered by further arms control measures not only on the part of nuclear-weapon States but also on the part of non-nuclear-weapon States. The example of the Treaty of Tlatelolco should be repeated in other regions of the world, especially in those regions where the threat of further proliferation has been hanging on for long. A nuclear-weapon-free zone as a feasible objective would be the most suitable remedy for those States which are not expected to adhere to the NPT because of its discriminatory nature. The study of the Ad hoc Group of Experts should also be instructive for those embarking on a new endeavour or for those resuming their drive towards this objective. If the NPT can be matched by the establishment of denuclearized zones all over the globe, the proliferation of nuclear weapons would then cease to be a source of concern.



## CONCLUSIONS

Throughout the present study, the Treaty on the Non-Proliferation of Nuclear Weapons has been analysed on the basis of the five principles of UN General Assembly resolution 2028(XX). Each principle has so far been applied to those parts of the Treaty it relates to most. Principle (a) has been applied to Articles I and II containing the basic obligations; principle (b) to Articles IV and V on the peaceful uses of nuclear energy as well as to Security Council Resolution 255 on nuclear security guarantees; principle (c) to Article VI on the cessation of the nuclear arms race and nuclear disarmament; principle (d) to Article III on international safeguards, Article IX on universality of adherence and Articles VIII and X on the Treaty's adaptability to changing circumstances; and lastly principle (e) to Article VII on nuclear-weapon-free zones.

Having reached this stage, it becomes possible to assess in a wider perspective the compliance of the totality of the Treaty's provisions to each of the five principles.

As far as principle (a) is concerned, the Treaty is not void of any loop-holes which might permit nuclear or non-nuclear Powers to proliferate, directly or indirectly, nuclear weapons in any form. In permitting under Articles I and II the assistance in the manufacture of nuclear weapons between the nuclear-weapon States themselves as well as from non-nuclear-weapon States to nuclear-weapon States, the Treaty is contributing to the further vertical proliferation of the latter States. An equally serious loop-hole left open in Article II is that assistance in the manufacture of nuclear weapons or other nuclear explosive devices from non-nuclear-weapon States Parties to the Treaty to non-nuclear-

weapon States not parties to it is not explicitly prohibited. Although assurances were given by the two co-authors of the Treaty, i.e., the Soviet Union and the United States, that such assistance, if it ever takes place, would be considered as a violation of the Treaty, the elimination of this loophole would definitely have been preferable.

With regard to principle (b), an acceptable balance of mutual responsibilities and obligations of the nuclear and non-nuclear Powers has been hard to achieve in view of the insistence of the two co-authors to base the Treaty on a clear-cut distinction between nuclear-weapon States and non-nuclear-weapon States. The discriminatory nature of the Treaty has more particularly marked the Treaty's key provisions contained in Articles I, II and III. No restrictions whatsoever are imposed on the nuclear-weapon States' freedom to carry on their own vertical proliferation. They are also exempted from the application of international safeguards on their nuclear activities whether peaceful or military, although it has to be pointed out that both the United Kingdom and the United States have voluntarily accepted to submit their peaceful nuclear activities to international safeguards. The compensatory provisions of Articles IV, V and VI depend almost entirely in their implementation on the good faith and co-operation of the nuclear-weapon States Party to the Treaty. It must be noted, however, that a new institutional framework for the future utilisation of nuclear energy for peaceful purposes has been set up by the International Atomic Energy Agency. As another compensatory measure, Security Council resolution 255 is of a doubtful value and its effectiveness would basically depend on the mutual understanding of the guarantor States.

Principle (c) has been met in the Treaty by the meagre provisions of Article VI and the corresponding paragraphs of the Preamble. More explicit and precise provisions would have been needed in this respect. The steps which so far have been taken by the two super-Powers in the field of arms control

are still far from meeting the expectations of the non-nuclear-weapon States.

As to principle (d), the effectiveness of the Treaty depends on the proper implementation of all its provisions and, more particularly, those provisions especially designed for this purpose, i.e., Articles III, VIII, IX and X. As far as Article III is concerned, a new system of safeguards has been designed for the non-nuclear-weapon States Party to the Treaty. Although the NPT system seems to be operating satisfactorily, Article III itself needs to be strengthened, if the Treaty is to become an effective barrier to the proliferation of nuclear weapons.

The Treaty also contains in its Article IX workable provisions to ensure the widest possible adherence to it. However, because of the Treaty's discriminatory nature as well as for economic and security considerations, this widest adherence is not forthcoming. The Indian nuclear explosion of 18 May 1974 has rendered such an objective less attainable, especially if no measures were to be taken to bolster the Treaty's viability.

Moreover, measures provided for in Articles VIII and X for adapting the Treaty to changing circumstances were put to the test at the First Review Conference. In spite of the shortcomings of the provisions of the two articles, they seem so far to have worked out well as safety valves.

Finally, principle (e) has found another but similar expression in Article VII of the Treaty. Apart from Latin America no other densely populated region of the world has yet followed the example of the Treaty of Tlatelolco.

The failure of the NPT to comply in general with the five principles set forth in the UN General Assembly resolution 2028(XX) is quite regrettable. This should not be, however, a source of despair. On the other hand, the not so negligible steps taken in implementing the Treaty's provisions should encourage further efforts to secure a more comprehensive implementation.

The first NPT review conference had been the first occasion to examine measures aimed at introducing certain changes and additions to the text of the Treaty itself and to lay the ground for concluding complementary measures to the NPT. However, the Review Conference was deprived from introducing or at least examining amendments to the Treaty. This has certainly weakened the role of the Conference in promoting the cause of nuclear non-proliferation. In retrospect, the Conference of 1975 appears as an exercise in futility between the haves, i.e., the nuclear-weapon States Party to the NPT and in some instances their close industrialized allies; and the have not, the third World countries. The confrontation between the two categories of countries was the most significant symptom of the Conference

In the field of peaceful uses of nuclear energy, supplier States had already started through a concerted effort to impose certain restrictions in the supply of nuclear material and equipment to the importing countries of the third World. Therefore, it was not surprising that one of the most elaborate parts of the Final Declaration of the Conference was the part concerned with the review of Article IV of the NPT. The Conference recognized that there continued to be need for the fullest possible exchange of nuclear materials, equipment and technology, including up-to-date developments.

With regard to peaceful nuclear explosions, a certain disappointment could be felt among the Third World countries for the waning of the interest and effort on the part of the United States in this domain as well as for the lack of preparedness on the part of both nuclear super-Powers to commence immediate negotiations with a view of concluding a special international agreement regulating the use of peaceful nuclear explosions.

On the issues of disarmament, and more particularly nuclear disarmament, and security assurances, the rift was even greater between the nuclear-weapon States and the non-

nuclear-weapon States. The failure to adopt the three draft Protocols on these issues exemplified the inertia of the Conference in going beyond certain limits. It should be recalled that the Protocols were rejected by the nuclear-weapon States on the basis that they were, inter alia, tantamount to introducing amendments to the NPT.

As to the application of IAEA safeguards, a feeling of inequality of treatment between nuclear-weapon States and non-nuclear-weapon States resurged but was muted in the Final Declaration. Although two nuclear-weapon States had offered to place part of their peaceful nuclear activities under IAEA safeguards, a great number of non-nuclear-weapon States at the Conference were of the view that safeguards should be applied at least on all the peaceful nuclear activities of the nuclear-weapon States.

Had it been possible to examine and introduce amendments at the Review Conference would this have helped to accelerate the implementation of the NPT in all its aspects by the nuclear-weapon States? The answer must be in the negative. Five years after the First Review Conference, the nuclear-weapon States do not seem to have even paid too much attention to the pleas of the non-nuclear-weapon States in 1975. More restrictions are imposed by them and their industrialized allies on the trade of so-called "sensitive" nuclear material, equipment and even knowledge. Peaceful nuclear explosions have reached a dead end in the United States and are on uncertain ground in the Soviet Union. Real progress towards nuclear disarmament and arms control is lagging. Even the SALT II Agreement lacks the minimum element of freeze on the production of new nuclear-weapon-delivery vehicles. The symbolic application of IAEA safeguards in response to the offers made by the United States and the Soviet Union and recently by France does not obviously establish the equality of treatment in this domain so long sought by the non-nuclear-weapon States.

In view of the above how is it possible to explain the

increase in the number of States Parties to the NPT from 95 before the convening of the NPT Review Conference in 1975 to 112 as of 1 January 1980? Most of these States have no or insignificant nuclear activities in their territory. Some of them hope that their adherence to the NPT would render some nuclear supplier States more amenable to assist them in the field of transfer of nuclear technology. Some others feel that as long as they have to submit to international safeguards, it is easier to accept them under the umbrella of the NPT rather than as a direct result of a bilateral agreement. On the other hand, what is more significant is that none of the reticent, potential nuclear-weapon Powers or the so-called Threshold States has adhered or expected to adhere to the NPT such as Argentina, Brazil, India, Israel, Pakistan and South Africa.

The forthcoming NPT Review Conference to be held in Geneva in August-September 1980 is one additional reason instigating a number of States to accelerate their adherence to the NPT, so as to participate fully in its deliberations and in formulating its results. At the end of 1979 some States which had signed but had not yet ratified the NPT were known to be taking steps towards ratification.

not carried out to serve military ends. Such a measure would partially contribute to the cessation of the nuclear arms race on the one hand, and help to maintain the Indian programme "peaceful", on the other hand. It would also appease the worries of India's rivals in the Asian scene.

The establishment of nuclear-weapon-free zones offers advantages which cannot otherwise be obtained through a universal instrument such as the NPT. The comparison already made between the provisions of the NPT and those of the Treaty of Tlatelolco clearly demonstrates this fact.

To conclude, if the further proliferation of nuclear weapons is to be really averted, the nuclear-weapon States have to take the first step in de-emphasising the role and

importance of nuclear weapons as an instrument of policy.  
A reversal of the nuclear arms race is needed if humankind  
is to live in a more secure world.

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